

### **Important information**

The tables "Chemical resistance of plastics", "Plastics and their properties" and "Viscosity of liquids" as well as the information about chemical resistance given in the particular product descriptions have been drawn up based on information provided by various raw material manufacturers. These values are based solely on laboratory tests with raw materials. Plastic components produced from these raw materials are frequently subject to influences that cannot be recognized in laboratory tests (temperature, pressure, material stress, effects of chemicals, construction features, etc.). For this reason the values given are only to be regarded as being guidelines. In critical cases it is essential that a test is carried out first. No legal claims can be derived from this information; nor do we accept any liability for it. A knowledge of the chemical and mechanical resistance alone is not sufficient for the evaluation of the usability of a product. For example, the regulations concerning flammable liquids (explosion prevention) must also be taken into consideration.

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Version 3.12 (26.01.2024)

| CHEMICALS                               | FORMULA                                                           | CAS-NR.     | CONCENTRATION | HAZARD NOTE | FLAMMABLE | thermoplastics |      |     |     |      |     |     |     |     |     |          |           |     |              | fluoroplastics |      |      |      | elastomers |     |     |      | metals |      |                                                          |                                                         | Hastelloy C | COMMENT |
|-----------------------------------------|-------------------------------------------------------------------|-------------|---------------|-------------|-----------|----------------|------|-----|-----|------|-----|-----|-----|-----|-----|----------|-----------|-----|--------------|----------------|------|------|------|------------|-----|-----|------|--------|------|----------------------------------------------------------|---------------------------------------------------------|-------------|---------|
|                                         |                                                                   |             |               |             |           | HDPE           | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN | ECTFE / ETFE | FEP            | PTFE | PVDF | EPDM | FPM / FKM  | NBR | SI  | AL   | V2A    | V4A  |                                                          |                                                         |             |         |
| Acetaldehyde                            | C <sub>2</sub> H <sub>4</sub> O                                   | 000075-07-0 | 40 %          | F+, Xn      | X         | 3/3            | 2/4  | 2/0 | 4/4 | (4)  | 2/4 | 2/0 | 3/4 | 4/4 | 4/4 | 4/4      | 0/0       | 4/4 | 2/3          | (1)            | 1/1  | 4/4  | 3/0  | 4/4        | 4/4 | 0/0 | (1)  | (1)    | (1)  | 3/4                                                      | Acetic aldehyde; Ethanal; Ethyl aldehyde                |             |         |
| Acetaldehyde                            | C <sub>2</sub> H <sub>4</sub> O                                   | 000075-07-0 | techn. pure   | F+, Xn      | X         | 3/3            | 2/4  | 2/0 | 4/4 | (4)  | 2/4 | 2/0 | 3/4 | 4/4 | 4/4 | 4/4      | 0/0       | 4/4 | 2/3          | (1)            | 1/1  | 4/4  | 3/0  | 4/4        | 4/4 | 0/0 | (1)  | (1)    | (1)  | 1/1                                                      |                                                         |             |         |
| Acetamide                               | C <sub>2</sub> H <sub>5</sub> NO                                  | 000060-35-5 | saturated     | Xn          |           | 1/1            | 1/1  | 1/0 | 4/4 | 0/0  | 1/1 | 1/0 | 1/1 | 1/1 | 4/4 | 4/4      | 0/0       | 1/1 | 1/1          | 1/1            | 1/1  | 1/0  | 4/4  | 1/0        | 0/0 | (1) | (1)  | (1)    | 1/1  |                                                          |                                                         |             |         |
| Acetic acid                             | C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>                      | 000064-19-7 | 50 %          | C           |           | 1/1            | 1/1  | 4/4 | 1/2 | 0/0  | 1/1 | 3/4 | 1/1 | 2/2 | 2/2 | 1/2      | 0/0       | 0/0 | 1/2          | 1/1            | 1/1  | 1/1  | 4/4  | 4/4        | 4/4 | 0/0 | 1/3  | 1/1    | 1/1  | 1/1                                                      |                                                         |             |         |
| Acetic acid                             | C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>                      | 000064-19-7 | 100 %         | C+          | X         | 0/0            | 0/0  | 4/4 | 4/4 | (3)  | 4/4 | 1/3 | 0/0 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1            | 1/1  | 1/1  | 4/4  | 4/4        | 4/4 | 0/0 | 1/3  | 1/2    | 1/2  | 1/1                                                      |                                                         |             |         |
| Acetic acid                             | C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>                      | 000064-19-7 | 90 %          | C+          | X         | 1/1            | 1/2  | 4/4 | 4/4 | 4/4  | 1/3 | 4/4 | 1/2 | 4/4 | 3/4 | 1/2      | 4/4       | 4/4 | 1/1          | 1/1            | 1/1  | 1/1  | 4/4  | 4/4        | 4/4 | 0/0 | 1/3  | 1/2    | 1/2  | 1/1                                                      |                                                         |             |         |
| Acetic acid                             | C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>                      | 000064-19-7 | 10 %          | Xi          |           | 1/1            | 1/1  | 4/4 | 1/2 | 1/1  | 3/0 | 1/4 | 1/1 | 1/1 | 1/0 | 1/3      | 1/0       | 1/3 | 1/1          | 1/1            | 1/1  | 1/1  | (2)  | (3)        | 3/3 | 0/0 | 1/3  | 1/1    | 1/1  | 1/1                                                      |                                                         |             |         |
| Acetic acid                             | C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>                      | 000064-19-7 | 5 %           | Xi          |           | 1/1            | 1/3  | 4/4 | 1/2 | 1/1  | 1/1 | 1/3 | 1/1 | 1/1 | 1/1 | 1/1      | 3/0       | 1/1 | 1/1          | 1/1            | 1/1  | 1/0  | 3/3  | 3/3        | 0/0 | 1/3 | 1/2  | 1/1    | 1/1  |                                                          |                                                         |             |         |
| Acetic acid chloride                    | -> see: Acetyl chloride                                           |             |               |             |           |                |      |     |     |      |     |     |     |     |     |          |           |     |              |                |      |      |      |            |     |     |      |        |      |                                                          |                                                         |             |         |
| Acetic acid sodium salt                 | -> see: Sodium acetate                                            |             |               |             |           |                |      |     |     |      |     |     |     |     |     |          |           |     |              |                |      |      |      |            |     |     |      |        |      |                                                          |                                                         |             |         |
| Acetic aldehyde                         | -> see: Acetaldehyde                                              |             |               |             |           |                |      |     |     |      |     |     |     |     |     |          |           |     |              |                |      |      |      |            |     |     |      |        |      |                                                          |                                                         |             |         |
| Acetic anhydride                        | C <sub>4</sub> H <sub>6</sub> O <sub>3</sub>                      | 000108-24-7 | techn. pure   | C           | X         | 4/4            | 3/3  | 3/3 | 4/4 | 0/0  | 4/4 | (2) | 1/3 | 4/4 | 4/4 | 4/4      | 0/0       | 0/0 | 1/0          | 1/1            | 4/4  | 3/0  | 4/4  | 4/4        | 0/0 | (2) | 1/1  | 1/1    | 1/1  |                                                          |                                                         |             |         |
| Acetic chloride                         | -> see: Acetyl chloride                                           |             |               |             |           |                |      |     |     |      |     |     |     |     |     |          |           |     |              |                |      |      |      |            |     |     |      |        |      |                                                          |                                                         |             |         |
| Acetone                                 | C <sub>3</sub> H <sub>6</sub> O                                   | 000067-64-1 |               | F, Xi       | X         | 1/1            | 3/3  | 1/0 | 4/4 | 4/4  | 2/3 | 1/3 | 1/3 | 4/4 | 4/4 | 4/4      | 0/0       | 4/4 | 2/3          | (1)            | 1/1  | 3/4  | 1/0  | 4/4        | 4/4 | 0/0 | 1/1  | 1/1    | 1/1  | 1/1                                                      | Propanone, 2-; Dimethyl ketone; Methyl ketone           |             |         |
| Acetonitrile                            | C <sub>2</sub> H <sub>3</sub> N                                   | 000075-05-8 |               | F, T        | X         | 1/1            | 1/1  | 1/0 | 4/4 | (4)  | 3/4 | (3) | 3/4 | 4/4 | 4/4 | 4/4      | 0/0       | 0/0 | 1/1          | (1)            | (1)  | 1/1  | (3)  | (3)        | 4/4 | 0/0 | (1)  | (1)    | (1)  | 0/0                                                      | Methyl cyanide; Cyanomethane; Ethanenitrile             |             |         |
| Acetonyl chloride                       | -> see: Chloroacetone                                             |             |               |             |           |                |      |     |     |      |     |     |     |     |     |          |           |     |              |                |      |      |      |            |     |     |      |        |      |                                                          |                                                         |             |         |
| Acetophenone                            | C <sub>8</sub> H <sub>8</sub> O                                   | 000098-86-2 |               | Xn          |           | 0/0            | 1/0  | 1/0 | (4) | (4)  | (4) | 1/0 | 1/3 | 0/4 | 0/0 | 4/4      | 4/4       | 0/4 | 1/1          | 0/0            | 1/1  | 1/3  | 1/0  | 4/4        | 4/4 | 0/0 | 1/1  | (1)    | (1)  | 0/0                                                      | Phenylethanone, 1-; Phenyl methyl ketone; Acetylbenzene |             |         |
| Acetyl chloride                         | C <sub>2</sub> H <sub>3</sub> ClO                                 | 000075-36-5 | 100 %         | F, C        | X         | 0/0            | 0/0  | 4/4 | 4/4 | (4)  | (4) | 4/4 | 3/4 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | 1/0            | 1/1  | 4/4  | 1/0  | 4/4        | 0/0 | 4/4 | 1/2L | 1/1L   | 0/0  | Acetic chloride; Ethanoyl chloride; Acetic acid chloride |                                                         |             |         |
| Acetylene                               | C <sub>2</sub> H <sub>2</sub>                                     | 000074-86-2 | 100 %         | F+          | X         | 1/0            | 1/0  | 1/0 | 1/0 | 1/1  | 0/0 | 1/0 | 1/0 | 0/0 | 0/0 | 2/0      | 4/4       | 3/0 | (1)          | 1/1            | 1/0  | (1)  | 1/0  | 1/0        | 1/0 | 0/0 | (1)  | (1)    | (1)  | 1/1                                                      | Ethine; Ethyne                                          |             |         |
| Acetyloxybenzoic acid, 2-               | -> see: Acetylsalicylic acid                                      |             |               |             |           |                |      |     |     |      |     |     |     |     |     |          |           |     |              |                |      |      |      |            |     |     |      |        |      |                                                          |                                                         |             |         |
| Acetylsalicylic acid                    | C <sub>9</sub> H <sub>8</sub> O <sub>4</sub>                      | 000050-78-2 | 100 %         | Xn          |           | 0/0            | 0/0  | 1/0 | 0/0 | (2)  | 0/0 | (3) | 1/2 | 1/0 | 0/0 | 0/0      | 0/0       | 1/1 | 1/1          | 1/1            | 1/1  | 1/2  | (2)  | (3)        | 0/0 | 0/0 | 1/0  | 1/0    | 1/0  | 1/0                                                      | Acetyloxybenzoic acid, 2-;                              |             |         |
| Acrylonitrile                           | C <sub>3</sub> H <sub>3.5</sub> N                                 | 000107-13-1 |               | F, T        | X         | 1/1            | 1/3  | 1/0 | 4/4 | (4)  | 3/4 | (3) | 3/4 | 4/4 | 4/4 | 4/4      | 0/0       | 1/2 | 1/1          | 1/0            | 3/3  | 4/4  | 4/4  | 4/4        | 0/0 | 1/0 | 1/0  | 1/0    | 1/0  | 1/1                                                      | Cyanoethylene; Propenenitrile, 2-; Vinyl cyanide        |             |         |
| Adipic acid                             | C <sub>6</sub> H <sub>10</sub> O <sub>4</sub>                     | 000124-04-9 | saturated     | Xi          |           | 1/1            | 1/2  | 0/0 | 1/1 | (2)  | 1/1 | 1/3 | 1/1 | 1/1 | 2/2 | 1/3      | 1/3       | 0/0 | 1/1          | 1/1            | 1/1  | 1/0  | 1/0  | 1/0        | 1/0 | 0/0 | 1/0  | (2)    | (2)  | 1/1                                                      | Hexanedioic acid; Butanedicarboxylic acid, 1,4-         |             |         |
| Alanine, L-                             | C <sub>3</sub> H <sub>7</sub> NO <sub>2</sub>                     | 000056-41-7 |               | —           |           | 1/1            | 1/1  | 1/1 | 4/4 | (2)  | 1/1 | (1) | 1/1 | 1/1 | 4/4 | 4/4      | 0/0       | 0/0 | 1/1          | 1/1            | 1/1  | (1)  | 1/0  | (1)        | 0/0 | (2) | (2)  | (2)    |      |                                                          | Aminopropanoic acid, L-2; aminopropanoic acid, alpha-   |             |         |
| Allspice                                | —                                                                 | —           | ground        | ?           |           | 0/0            | 0/0  | (2) | 4/4 |      | 0/0 | (2) | (2) | 4/4 | 0/0 | 0/0      | 0/0       | 3/3 | 0/0          | (1)            | (1)  | (1)  | (2)  | (2)        | (2) | 0/0 | (1)  | (1)    | (1)  |                                                          |                                                         |             |         |
| Allyl acetate                           | C <sub>6</sub> H <sub>10</sub> O <sub>2</sub>                     | 000591-87-7 | 100 %         | F, T        | X         | 0/0            | 1/3  | 4/4 | 4/4 | (4)  | (4) | 1/3 | 4/4 | 0/0 | 0/0 | 0/0      | 4/4       | 0/0 | 0/0          | (1)            | 1/1  | (2)  | (3)  | 4/4        | 4/4 | 0/0 | (1)  | (1)    | (1)  |                                                          |                                                         |             |         |
| Allyl alcohol                           | C <sub>3</sub> H <sub>6</sub> O                                   | 000107-18-6 | 96 %          | F, T        | X         | 1/3            | 3/3  | 3/0 | 3/3 | 1/0  | 1/2 | (2) | 2/2 | 2/4 | 2/3 | 2/3      | 4/4       | 4/4 | 1/1          | 1/1            | 1/1  | (2)  | 1/0  | 4/4        | 3/0 | 0/0 | 1/1  | 1/1    | 1/1  | 1/1                                                      | Vinyl carbinol; Propenyl alcohol                        |             |         |
| Allyl chloride                          | C <sub>3</sub> H <sub>5</sub> Cl                                  | 000107-05-1 | 100 %         | F, T+       | X         | (3)            | 3/4  | 0/0 | (4) | (4)  | (4) | (2) | 4/4 | 0/0 | 0/0 | 4/4      | 4/4       | 0/0 | 0/0          | (1)            | (2)  | 1/1  | 4/4  | (3)        | 4/4 | 0/0 | 1/0  | (1L)   | (1L) | 0/0                                                      | Chloro-1-propene, 3-; Chloropropylene, 3-               |             |         |
| Allyl mustard oil                       | C <sub>8</sub> H <sub>9</sub> NS                                  | 000057-06-7 |               | T           | X         | 0/0            | 0/0  | 0/0 | (4) | (3)  | (4) | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 4/4 | 0/0          | (1)            | (1)  | (2)  | (3)  | (3)        | (4) | 0/0 | (1)  | (1)    | (1)  |                                                          | oleum sinapis                                           |             |         |
| Almond oil, sweet                       | —                                                                 | 008007-69-0 |               | —           |           | 0/0            | 0/0  | (2) | (1) | 1/0  | 0/0 | (2) | (2) | 3/4 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | (1)            | 1/1  | 1/1  | 4/4  | (1)        | (2) | 0/0 | (1)  | 1/1    | 1/1  |                                                          |                                                         |             |         |
| Alumina acidic                          | C <sub>2</sub> H <sub>7</sub> AlO <sub>5</sub> x H <sub>2</sub> O | 000142-03-0 | saturated     | Xi          |           | 1/1            | 1/0  | (2) | (2) | (2)  | 0/0 | 1/0 | 1/1 | 0/0 | 0/0 | 1/0      | 1/0       | 1/1 | 1/1          | 1/1            | 1/1  | (1)  | 1/0  | 4/4        | 3/3 | 0/0 | (1)  | 1/1    | 1/1  |                                                          |                                                         |             |         |
| Aluminium fluoride                      | AlF <sub>3</sub>                                                  | 007789-18-1 | aqueous       | Xi          |           | 1/1            | 1/1  | (3) | (2) | (2)  | 1/1 | 3/4 | 1/1 | 0/0 | 0/0 | 1/3      | 1/3       | 0/0 | 0/0          | 1/1            | 1/1  | 1/1  | 1/0  | 1/0        | 1/1 | 0/0 | 1/1  | 0/0    | 0/0  | 0/0                                                      |                                                         |             |         |
| Aluminum ammonium sulfate dodecahydrate | (NH <sub>4</sub> )Al(SO <sub>4</sub> ) <sub>2</sub>               | 007784-26-1 | saturated     | Xi          |           | 1/1            | 1/1  | 3/4 | (2) | (2)  | 0/0 | 3/4 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1            | 1/1  | (1)  | 1/0  | (2)        | 1/1 | 0/0 | 1/0  | 1/2    | 1/3  | 0/0                                                      |                                                         |             |         |
| Aluminum chloride                       | AlCl <sub>3</sub>                                                 | 007784-13-6 | 10 %          | ?           |           | 1/1            | 1/2  | 1/0 | 1/0 | (2)  | 1/1 | 3/4 | 1/1 | 1/1 | 0/0 | 1/1      | 0/0       | 1/1 | 2/2          | 1/1            | 1/1  | 1/1  | 1/0  | 1/0        | 1/1 | 0/0 | 4/4  | 4/4    | 3/4  | 1/1                                                      |                                                         |             |         |
| Aluminum chloride                       | AlCl <sub>3</sub>                                                 | 007784-13-6 | solid         | C           |           | 1/1            | 1/1  | 3/4 | (3) | 0/0  | 0/0 | 4/4 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)            | (2)  | (3)  | (3)  | (3)        | 0/0 | 4/4 | 4/4  | 3/4    | 1/1  |                                                          |                                                         |             |         |
| Aluminum chloride                       | AlCl <sub>3</sub>                                                 | 007784-13-6 | saturated     | C           |           | 1/1            | 1/1  | 3/4 | (2) | 0/0  | 0/0 | 4/4 | 1/1 | 0/0 | 0/0 | 1/1      | 0/0       | 1/1 | 0/0          | 1/1            | (1)  | 1/1  | (2)  | 1/0        | 1/1 | 0/0 | 4/4  | 4/4    | 3/4  | 1/1                                                      |                                                         |             |         |
| Aluminum hydroxide                      | Al(OH) <sub>3</sub>                                               | 021645-51-2 |               | Xi          |           | 1/1            | 1/2  | 1/1 | 1/1 | 1/1  | 1/2 | 1/1 | 1/2 | 2/2 | 2/2 | 1/2      | 1/1       | 1/1 | 1/1          | 1              | 1/1  | 1/1  | 1/1  | 1/1        | 1/1 | 1/1 | 1/1  | 1/1    | 1/1  | 0/0                                                      | small solubility - no chemical effect expected          |             |         |
| Aluminum nitrate                        | Al(NO <sub>3</sub> ) <sub>3</sub>                                 | 013473-90-0 | aqueous       | (O)         |           | 1/1            | 1/0  | 1/4 | 1/0 | (2)  | 1/0 | 3/4 | 1/1 | 1/0 | 1/0 | 1/0      | 1/0       | 1/0 | 0/0          | 1/1            | 1/1  | 1/1  | 1/0  | 1/0        | 1/0 | 0/0 | 4/4  | 1/0    | 1/0  | 1/1                                                      |                                                         |             |         |
| Aluminum oxide, alpha-                  | Al <sub>2</sub> O <sub>3</sub>                                    | 001344-28-1 | solid         | —           |           | 1/1            | 1/1  | 1/1 | 1/1 | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1      | 1/1       | 1/1 | 1/1          | 1/1            | 1/1  | 1/1  | 1/1  | 1/1        | 1/1 | 1/1 | 1/1  | 1/1    | 1/1  | 0/0                                                      | small solubility - no chemical effect expected          |             |         |
| Aluminum potassium sulfate              | KAl(SO <sub>4</sub> ) <sub>2</sub> x 12H <sub>2</sub> O           | 010043-67-1 | diluted       | Xi          |           | 1/1            | 1/1  | 1/0 | 1/0 | (2)  | 0/0 | 3/4 | 1/1 | 1/1 | 1/0 | 1/3      | 1/3       | 1/1 | 1/1          | 1/1            | 1/1  | 1/1  | 1/0  | 3/3        | 0/0 | 1/0 | 1/1  | 1/1    | 1/1  | 1/1                                                      |                                                         |             |         |

| CHEMICALS                    | FORMULA                                                           | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics |      |       |     |     |      |     |     |     |     | fluoroplastics |          |           |     | elastomers   |     |      |      | metals |           |     |     |      |      |      |              |                                                                                                  |
|------------------------------|-------------------------------------------------------------------|-------------|---------------|-------------|----------------|------|-------|-----|-----|------|-----|-----|-----|-----|----------------|----------|-----------|-----|--------------|-----|------|------|--------|-----------|-----|-----|------|------|------|--------------|--------------------------------------------------------------------------------------------------|
|                              |                                                                   |             |               |             | FLAMMABLE      | HDPE | LDPE  | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU            | PVC HART | PVC WEICH | SAN | ECTFE / ETFE | FEP | PTFE | PVDF | EPDM   | FPM / FKM | NBR | SI  | AL   | V2A  | V4A  | Hastelloy C  | COMMENT                                                                                          |
| Ammonium carbonate           | (NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub>                   | 010361-29-2 | 50 %          | Xn          |                | 1/1  | 1/1   | 1/0 | 3/0 | 0/0  | 1/0 | (2) | 1/1 | 1/1 | 1/0            | 1/3      | 1/0       | 1/1 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | 3/0       | 4/4 | 0/0 | 1/1  | 1/1  | 1/1  |              |                                                                                                  |
| Ammonium carbonate           | (NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub>                   | 010361-29-2 | aqueous       | Xn          |                | 1/1  | 1/1   | 1/0 | (3) | (2)  | 0/0 | (2) | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | 3/0       | 4/4 | 0/0 | 1/1  | 1/1  | 1/1  |              |                                                                                                  |
| Ammonium chloride            | (NH <sub>4</sub> )Cl                                              | 012125-02-9 | solid         | Xn          |                | 1/1  | 1/1   | 1/0 | 1/0 | (2)  | 0/0 | 2/3 | 1/1 | 0/0 | 0/0            | 1/0      | 0/0       | 0/0 | 0/0          | (1) | 1/1  | 1/1  | 1/0    | 1/0       | 1/1 | 0/0 | 3/4  | 1/3L | 1/2L | 1/1          | sal ammoniac                                                                                     |
| Ammonium chloride            | (NH <sub>4</sub> )Cl                                              | 012125-02-9 | aqueous       | Xn          |                | 1/1  | 1/1   | 1/0 | 1/0 | (1)  | 1/1 | 2/3 | 1/1 | 1/1 | 1/0            | 1/3      | 1/3       | 1/1 | 1/1          | 1/1 | 1/1  | 1/0  | 1/1    | 1/1       | 0/0 | 3/4 | 1/3L | 1/2L | 1/1  | sal ammoniac |                                                                                                  |
| Ammonium difluoride          | F <sub>2</sub> H <sub>3</sub> N                                   | 001341-49-7 | 50 %          | T, C        |                | 1/1  | 1/1   | 2/0 | (4) | 0/0  | 0/0 | (4) | 1/1 | 0/0 | 0/0            | 1/3      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | (3)       | 2/3 | 0/0 | (3)  | 1/0  | 1/0  |              |                                                                                                  |
| Ammonium ferric sulfate      | (NH <sub>4</sub> )Fe(SO <sub>4</sub> ) <sub>2</sub>               | 007783-83-7 | saturated     | Xi          |                | 1/1  | 1/1   | 1/0 | (2) | (2)  | 0/0 | (3) | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | (1)  | 1/0    | (2)       | (1) | 0/0 | (4)  | 0/0  | 0/0  |              |                                                                                                  |
| Ammonium ferrous sulfate     | (NH <sub>4</sub> ) <sub>2</sub> Fe(SO <sub>4</sub> ) <sub>2</sub> | 007783-85-9 |               | Xi          |                | 1/1  | 1/1   | (2) | (2) | 0/0  | (3) | 1/1 | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 1/1 | 1/1          | 1/1 | 1/1  | (1)  | (1)    | (1)       | 0/0 | 4/4 | (1)  | (1)  |      |              |                                                                                                  |
| Ammonium fluoride            | (NH <sub>4</sub> )F                                               | 012125-01-8 | saturated     | T, C        |                | 1/1  | 1/1   | 1/0 | 4/4 | (2)  | 1/0 | (2) | 1/1 | 0/0 | 0/0            | 1/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | 2/3       | 1/1 | 0/0 | (4)  | (1)  | (1)  | ?            |                                                                                                  |
| Ammonium fluoride            | (NH <sub>4</sub> )F                                               | 012125-01-8 | aqueous       | T, C        |                | 1/1  | 1/1   | 1/0 | (3) | (2)  | 0/0 | (2) | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | 2/3       | 1/1 | 0/0 | (4)  | 1/3  | 1/3  | 1/1          |                                                                                                  |
| Ammonium glycolate           | C <sub>2</sub> H <sub>3</sub> NO <sub>3</sub>                     | 035249-89-9 |               | (Xi)        |                | 1/1  | 1/2   | (1) | 2/3 | (2)  | 1/2 | (2) | 1/2 | 1/1 | 2/2            | 1/1      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | (1)  | 1/0    | (3)       | (1) | 0/0 | (2)  | (2)  | (2)  |              | Acetic acid                                                                                      |
| Ammonium heptamolybdate      | (NH <sub>4</sub> ) <sub>6</sub> Mo <sub>7</sub> O <sub>24</sub>   | 012054-85-2 |               | Xi          |                | 1/1  | 1/1   | (1) | (2) | (2)  | 0/0 | (1) | 1/1 | 1/1 | 0/0            | 0/0      | 0/0       | 1/1 | 0/0          | 1/1 | 1/1  | (1)  | 1/0    | (3)       | (1) | 0/0 |      | (1)  | 0/0  |              |                                                                                                  |
| Ammonium hydroxide           | NH <sub>3</sub> + H <sub>2</sub> O                                | 001336-21-6 | 30 %          | C, N        |                | 1/1  | 1/2   | (3) | 4/4 | 2/4  | 1/2 | 1/2 | 1/2 | 2/3 | 2/3            | 1/2      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | (2)  | 1/0    | (3)       | 2/3 | 0/0 | 1/1  | 1/1  | 1/1  | 1/1          |                                                                                                  |
| Ammonium hydroxide           | NH <sub>3</sub> + H <sub>2</sub> O                                | 001336-21-6 | 5 %           | Xi          |                | 1/1  | 1/1   | (2) | 3/4 | (2)  | 1/1 | 1/2 | 1/1 | 1/3 | 2/2            | 1/1      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | (2)  | 1/0    | (2)       | 2/3 | 0/0 | 1/1  | 1/1  | 1/1  | 1/1          |                                                                                                  |
| Ammonium hydroxide           | NH <sub>3</sub> + H <sub>2</sub> O                                | 001336-21-6 |               | C/Xi, N     |                | 1/1  | 1/1   | (3) | 4/4 | 2/4  | 1/1 | 1/2 | 1/1 | 2/3 | 2/3            | 1/2      | 1/3       | 2/2 | 1/1          | 1/1 | 1/1  | 1/3  | 1/0    | (3)       | 4/4 | 0/0 | 1/1  | 1/1  | 1/1  | 1/1          |                                                                                                  |
| Ammonium mercaptan           | -> see: Ammonium bisulfide                                        |             |               |             |                |      |       |     |     |      |     |     |     |     |                |          |           |     |              |     |      |      |        |           |     |     |      |      |      |              |                                                                                                  |
| Ammonium nitrate             | (NH <sub>4</sub> )NO <sub>3</sub>                                 | 006484-52-2 | 10 %          | O           |                | 1/3  | 0/0   | 1/0 | (1) | (2)  | 0/0 | 2/4 | 1/1 | 1/1 | 1/0            | 1/3      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1  | 1/0    | 2/2       | 1/1 | 0/0 | 1/1  | 1/1  | 1/1  | 1/1          | Nitric acid; Ammonium salt                                                                       |
| Ammonium nitrate             | (NH <sub>4</sub> )NO <sub>3</sub>                                 | 006484-52-2 | saturated     | O           |                | 1/3  | 1/1   | 1/0 | 1/0 | (2)  | 1/1 | 2/4 | 1/1 | 1/0 | 1/0            | 1/1      | 1/0       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1  | 1/0    | 2/2       | 1/1 | 0/0 | (2)  | 1/1  | 1/1  | 1/1          |                                                                                                  |
| Ammonium nitrite             | (NH <sub>4</sub> )NO <sub>2</sub>                                 | 013446-48-5 | aqueous       | O, Xn       |                | (1)  | (1)   | (2) | (2) | (2)  | 0/0 | (2) | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | (3)       | 1/0 | 0/0 | (2)  | (1)  | (1)  |              |                                                                                                  |
| Ammonium oxalate             | C <sub>2</sub> H <sub>8</sub> N <sub>2</sub> O <sub>4</sub>       | 014258-49-2 |               | Xn          |                | 1/1  | 1/2   | (1) | 1/1 | (2)  | 1/2 | (2) | 1/2 | 1/1 | 1/1            | 1/1      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | (1)  | 1/0    | (3)       | (1) | 0/0 | 1/1  | 1/1  | 1/1  | 0/0          |                                                                                                  |
| Ammonium persulfate          | (NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>     | 007727-54-0 | saturated     | O, Xn       |                | 0/0  | 0/0   | 4/4 | (2) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0            | 1/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | (3)       | 4/4 | 0/0 | 4/4  | (4)  | 3/4  | 0/0          |                                                                                                  |
| Ammonium persulfate          | (NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>     | 007727-54-0 | aqueous       | O, Xn       |                | 0/0  | 0/0   | 4/4 | (2) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | (3)       | 4/4 | 0/0 | 4/4  | (4)  | 3/4  | 0/0          |                                                                                                  |
| Ammonium phosphate, Mono-    | (NH <sub>4</sub> )H <sub>2</sub> PO <sub>4</sub>                  | 007722-76-1 | each          | Xi          |                | 1/1  | 1/1   | 1/0 | (2) | (2)  | 1/0 | (2) | 1/1 | 1/1 | 1/0            | 1/1      | 1/0       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1  | 1/0    | 3/0       | 1/1 | 0/0 | 4/4  | (1)  | (1)  | 1/1          |                                                                                                  |
| Ammonium polyphosphate (APP) | (NH <sub>4</sub> PO <sub>3</sub> ) <sub>n</sub>                   | 068333-79-9 |               | Xi          |                | 1/1  | 1/1   | (1) | (2) | (2)  | 0/0 | (1) | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | (1)  | 1/0    | (3)       | 1/1 | 0/0 | (3)  | (1)  | (1)  |              |                                                                                                  |
| Ammonium rhodanide           | -> see: Ammonium thiocyanate                                      |             |               |             |                |      |       |     |     |      |     |     |     |     |                |          |           |     |              |     |      |      |        |           |     |     |      |      |      |              |                                                                                                  |
| Ammonium salt                | -> see: Ammonium nitrate                                          |             |               |             |                |      |       |     |     |      |     |     |     |     |                |          |           |     |              |     |      |      |        |           |     |     |      |      |      |              |                                                                                                  |
| Ammonium sulfate             | (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>                   | 007783-20-2 | 10 %          | Xn          |                | 1/1  | 1/1   | 1/0 | 1/1 | (2)  | (1) | 1/0 | 1/1 | 1/1 | 1/0            | 1/3      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1  | 1/0    | 2/3       | 1/1 | 0/0 | 1/1  | 1/1  | 1/1  | 1/1          |                                                                                                  |
| Ammonium sulfate             | (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>                   | 007783-20-2 | saturated     | Xn          |                | 1/1  | 1/1   | 1/0 | 1/1 | (2)  | 1/1 | 2/0 | 1/1 | 1/0 | 1/0            | 1/1      | 1/0       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1  | 1/0    | 2/3       | 1/1 | 0/0 | 1/1  | 1/1  | 1/2  | 1/1          |                                                                                                  |
| Ammonium sulfide             | (NH <sub>4</sub> ) <sub>2</sub> S                                 | 012135-76-1 | each          | T, C        | X              | 1/1  | 1/1   | 1/0 | 4/4 | 0/0  | 1/1 | (2) | 1/1 | 0/0 | 0/0            | 1/3      | 1/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | (3)       | 1/2 | 0/0 | 1/1  | (1)  | (1)  | ?            | Diammonium sulfide;                                                                              |
| Ammonium sulfide             | (NH <sub>4</sub> ) <sub>2</sub> S                                 | 012135-76-1 | aqueous       | T, C        | X              | 1/1  | 1/1   | 1/0 | (3) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 1/0    | (3)       | 3/3 | 0/0 | 1/1  | (1)  | (1)  | 1/1          |                                                                                                  |
| Ammonium sulfocyanide        | -> see: Ammonium thiocyanate                                      |             |               |             |                |      |       |     |     |      |     |     |     |     |                |          |           |     |              |     |      |      |        |           |     |     |      |      |      |              |                                                                                                  |
| Ammonium thiocyanate         | CH <sub>4</sub> N <sub>2</sub> S                                  | 001762-95-4 |               | Xn          |                | 1/1  | 1/1   | (3) | 1/0 | (2)  | 1/1 | 1/0 | 1/1 | 1/3 | 0/0            | 1/0      | 0/0       | 1/1 | 1/1          | 1/1 | 1/1  | (1)  | 1/0    | (3)       | 1/0 | 0/0 | (2)  | (1)  | (1)  |              | Ammonium sulfocyanide; Ammonium rhodanide; Thiocyanic acid, Ammonium salt; Ammonium sulfocyanate |
| Amomum                       | —                                                                 | —           |               | ?           |                | 0/0  | 0/0   | (2) | (2) | (2)  | 0/0 | (2) | (2) | 4/4 | 0/0            | 0/0      | 0/0       | 1/1 | 0/0          | (1) | (1)  | (1)  | (2)    | (1)       | (2) | 0/0 | (1)  | (1)  | (1)  |              |                                                                                                  |
| Amyl acetate, normal         | C <sub>7</sub> H <sub>11</sub> O <sub>2</sub>                     | 000628-63-7 |               | —           | X              | 1/2  | 2/3   | 2/0 | 4/4 | 1/3  | 2/3 | (1) | 3/4 | 4/4 | 4/4            | 4/4      | 4/4       | 4/4 | 1/1          | 1/1 | 1/1  | 1/3  | 3/4    | 4/4       | 4/4 | 0/0 | 1/1  | 1/1  | 1/1  | 0/0          |                                                                                                  |
| Amyl alcohol, n-             | -> see: Pentanol, 1-                                              |             |               |             |                |      |       |     |     |      |     |     |     |     |                |          |           |     |              |     |      |      |        |           |     |     |      |      |      |              |                                                                                                  |
| Amyl chloride                | C <sub>5</sub> H <sub>11</sub> Cl                                 | 000543-59-9 |               | F, Xn       | X              | 3/4  | 4/4   | 1/0 | 4/4 | 0/0  | 4/4 | (2) | 4/4 | 4/4 | 4/4            | 4/4      | 4/4       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1  | 4/4    | 1/0       | 4/4 | 0/0 | 3/4  | 3/4L | 3/4L | 0/0          |                                                                                                  |
| Amyl cinnamic aldehyde       | C <sub>14</sub> H <sub>16</sub> O                                 | 000122-40-7 |               | Xi          |                | 0/0  | 0/0   | 0/0 | (4) | 0/0  | (4) | (3) | (3) | 0/0 | 0/0            | 0/0      | 0/0       | 4/4 | 0/0          | (1) | (1)  | (2)  | (4)    | (3)       | (4) | 0/0 | (1)  | (1)  | (1)  |              | odoriferous substance                                                                            |
| Aniline                      | C <sub>6</sub> H <sub>7</sub> N                                   | 000062-53-3 |               | T           |                | 1/2  | 1/3   | 3/4 | 4/4 | 0/0  | 2/3 | 1/3 | 2/3 | 4/4 | 4/4            | 4/4      | 4/4       | 0/4 | 2/4          | 1/1 | 1/1  | 1/4  | 4/4    | 2/4       | 4/4 | 0/0 | 1/0  | 1/0  | 1/0  | 1/1          |                                                                                                  |
| Aniline hydrochloride        | C <sub>6</sub> H <sub>5</sub> ClN <sub>6</sub>                    | 000142-04-1 | saturated     | T           |                | 1/3  | 0/0   | (3) | (3) | 0/0  | 0/0 | (3) | 1/3 | 0/0 | 0/0            | 1/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1  | 3/0    | 2/2       | 3/3 | 0/0 | 4/4  | 4/4  | 4/4  |              |                                                                                                  |
| Anise                        | —                                                                 | —           |               | ?           |                | 0/0  | 0/0   | (2) | (2) | (2)  | 0/0 | (2) | (2) | 0/0 | 0/0            | 0/0      | 0/0       | 1/1 | 0/0          | 1/1 | (1)  | (1)  | (2)    | (2)       | (2) | 0/0 | (1)  | (1)  | (1)  |              |                                                                                                  |
| Anise oil                    | —                                                                 | 084775-42-8 |               | Xi          |                | 0/0  | 0/0</ |     |     |      |     |     |     |     |                |          |           |     |              |     |      |      |        |           |     |     |      |      |      |              |                                                                                                  |

| CHEMICALS                                      | FORMULA                                                                           | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics ----- |      |      |     |     |      |     |     |     |     | fluoroplastics --- |          |           | elastomers --- |              |     | metals ----- |      |      |           | Hastelloy C | COMMENT |     |      |      |                      |                                                |                                                 |
|------------------------------------------------|-----------------------------------------------------------------------------------|-------------|---------------|-------------|----------------------|------|------|-----|-----|------|-----|-----|-----|-----|--------------------|----------|-----------|----------------|--------------|-----|--------------|------|------|-----------|-------------|---------|-----|------|------|----------------------|------------------------------------------------|-------------------------------------------------|
|                                                |                                                                                   |             |               |             | FLAMMABLE            | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU                | PVC HART | PVC WEICH | SAN            | ECTFE / ETFE | FEP | PTFE         | PVDF | EPDM | FPM / FKM |             |         | NBR | SI   | AL   | V2A                  | V4A                                            |                                                 |
| Atropine sulfate                               | C <sub>34</sub> H <sub>48</sub> N <sub>2</sub> SO <sub>10</sub> ·H <sub>2</sub> O | 000055-48-1 |               | T+          |                      | 1/1  | 1/1  | (2) | (1) | (2)  | 0/0 | (1) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 1/1            | 1/1          | 1/1 | 1/1          | (1)  | (2)  | (2)       | (1)         | 0/0     | (2) | (1)  | (1)  |                      |                                                |                                                 |
| Azabenzene                                     | -> see: Pyridine                                                                  |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |     |      |      |                      |                                                |                                                 |
| Azacyclohexane                                 | -> see: Piperidine                                                                |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |     |      |      |                      |                                                |                                                 |
| Azine                                          | -> see: Pyridine                                                                  |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |     |      |      |                      |                                                |                                                 |
| Azole                                          | -> see: Pyrrole                                                                   |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |     |      |      |                      |                                                |                                                 |
| Barium carbonate                               | BaCO <sub>3</sub>                                                                 | 000513-77-9 | saturated     | Xn          |                      | 1/1  | 1/1  | 1/1 | (1) | 1/1  | 1/1 | (1) | 1/1 | 1/1 | 0/0                | 1/0      | 1/0       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1  | 1/0       | 1/1         | 0/0     | 1/1 | 1/1  | 1/1  | 1/1                  | small solubility - no chemical effect expected |                                                 |
| Barium chloride                                | BaCl <sub>2</sub>                                                                 | 010361-37-2 | saturated     | T           |                      | 1/1  | 1/1  | 1/0 | 1/0 | 1/0  | 1/1 | (2) | 1/1 | 1/1 | 1/0                | 1/3      | 1/0       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1  | 1/0       | 1/1         | 0/0     | 1/1 | 1/1  | 1/2L | 1/1L                 | 1/1                                            |                                                 |
| Barium chloride                                | BaCl <sub>2</sub>                                                                 | 010361-37-2 | aqueous       | T           |                      | 1/1  | 1/1  | 1/0 | (2) | 1/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1  | 1/0       | 1/1         | 0/0     | 1/1 | 1/2L | 1/1L | 1/1                  |                                                |                                                 |
| Barium dibromide                               | BaBr <sub>2</sub>                                                                 | 010553-31-8 |               | Xn          |                      | 1/1  | 1/1  | (2) | (2) | 1/0  | 0/0 | (2) | 1/1 | 1/1 | 0/0                | 0/0      | 0/0       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | (1)       | 1/1         | 0/0     | (2) | (2L) | (2L) |                      |                                                |                                                 |
| Barium hydroxide                               | Ba(OH) <sub>2</sub>                                                               | 012230-71-6 | saturated     | Xn          |                      | 1/1  | 1/1  | 1/0 | (3) | 0/0  | 1/1 | (2) | 1/1 | 0/0 | 0/0                | 1/3      | 1/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/3  | 1/0  | 1/1       | 1/1         | 0/0     | (3) | 1/1  | 1/1  | 1/3                  |                                                |                                                 |
| Barium hydroxide                               | Ba(OH) <sub>2</sub>                                                               | 012230-71-6 | aqueous       | Xn          |                      | 1/1  | 1/1  | 1/0 | (3) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/3  | 1/0  | 1/1       | 1/1         | 0/0     | (3) | 1/1  | 1/1  | ?                    |                                                |                                                 |
| Barium sulfide                                 | BaS                                                                               | 021109-95-5 | saturated     | (T)         |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 1/1 | (2) | 1/1 | 0/0 | 1/0                | 1/0      | 1/0       | 0/0            | 0/0          | 1/1 | 1/1          | (2)  | 1/0  | 1/0       | 1/1         | 0/0     | (3) | (1)  | (1)  | 1/1                  |                                                |                                                 |
| Battery acid                                   | H <sub>2</sub> SO <sub>4</sub>                                                    | 007664-93-9 | 38 %          | C           |                      | 1/1  | 1/1  | 4/4 | 1/1 | (4)  | 1/1 | 4/4 | 1/1 | 1/1 | 1/1                | 1/3      | 3/4       | 0/0            | (1)          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 4/4         | 0/0     | 3/4 | 2/3  | 2/3  | 1/1                  | Sulfuric acid;                                 |                                                 |
| Beef tallow                                    | —                                                                                 | 061789-97-7 |               | —           |                      | 0/0  | 0/0  | 1/0 | 1/0 | (1)  | 0/0 | 1/0 | 1/1 | 1/1 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 4/4  | 1/1       | 1/1         | 0/0     | (1) | 1/1  | 1/1  |                      |                                                |                                                 |
| Beef tallow emulsion                           | —                                                                                 | —           | sulfonated    | (—)         |                      | 1/0  | 0/0  | (2) | (2) | 0/0  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0                | 1/0      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | 1/1  | 4/4  | (2)       | (2)         | 0/0     | (2) | (1)  | (1)  | 0/0                  |                                                |                                                 |
| Beer                                           | —                                                                                 | —           |               | —           |                      | 1/1  | 1/1  | 1/0 | 1/0 | 1/0  | 1/0 | 1/1 | 1/1 | 1/0 | 0/0                | 1/1      | 1/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/0       | 1/0         | 0/0     | 1/1 | 1/1  | 1/1  | 1/1                  |                                                |                                                 |
| Beeswax                                        | —                                                                                 | 008012-89-3 |               | —           |                      | 1/1  | 1/1  | 1/1 | (1) | 1/0  | 0/0 | 1/1 | 1/3 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | (1)  | (3)  | (1)       | (2)         | 0/0     | 1/1 | (1)  | (1)  |                      |                                                |                                                 |
| Benzaldehyde                                   | C <sub>7</sub> H <sub>6</sub> O                                                   | 000100-52-7 |               | Xn          |                      | 1/3  | 3/3  | 3/0 | 4/4 | 4/4  | 1/2 | 1/0 | 1/4 | 4/4 | 3/3                | 4/4      | 4/4       | 1/4            | 1/3          | 1/1 | 1/1          | 1/1  | 3/4  | 4/4       | 4/4         | 0/0     | 1/1 | 1/1  | 1/1  | 0/0                  | artificial almond oil                          |                                                 |
| Benzene                                        | C <sub>6</sub> H <sub>6</sub>                                                     | 000071-43-2 |               | F, T        | X                    | 3/4  | 3/4  | 2/0 | 4/4 | 4/4  | 2/3 | 1/2 | 3/4 | 4/4 | 4/4                | 4/4      | 0/0       | 0/4            | 1/2          | 1/1 | 1/1          | 1/1  | 1/3  | 4/4       | 3/3         | 4/4     | 0/0 | 1/1  | 1/1  | 0/0                  | Cyclohexatriene; Benzol                        |                                                 |
| Benzene chloride                               | -> see: Chlorobenzene                                                             |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |     |      |      |                      |                                                |                                                 |
| Benzenesulfonic acid                           | C <sub>6</sub> H <sub>6</sub> SO <sub>3</sub>                                     | 000098-11-3 | saturated     | C           |                      | 1/1  | 1/1  | (4) | (3) | (4)  | 0/0 | (4) | 2/4 | 0/0 | 1/0                | 2/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/4  | 4/4  | 1/0       | 4/4         | 0/0     | 3/4 | 0/0  | 1/0  | 0/0                  |                                                |                                                 |
| Benzoic acid                                   | C <sub>7</sub> H <sub>6</sub> O <sub>2</sub>                                      | 000065-85-0 | saturated     | Xn, Xi      |                      | 1/1  | 1/1  | 3/4 | 4/4 | 1/0  | 1/2 | 2/4 | 1/3 | 2/2 | 3/3                | 1/2      | 1/0       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 3/0  | 1/1       | 3/0         | 0/0     | 1/2 | 1/1  | 1/1  | 1/1                  |                                                |                                                 |
| Benzoic acid                                   | C <sub>7</sub> H <sub>6</sub> O <sub>2</sub>                                      | 000065-85-0 | aqueous       | Xn, Xi      |                      | 1/1  | 1/1  | 3/4 | 4/4 | 1/0  | 0/0 | 2/4 | 1/3 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 3/0  | 1/1       | 3/0         | 0/0     | 1/2 | 1/1  | 1/1  | 1/1                  |                                                |                                                 |
| Benzoic acid chloride                          | -> see: Benzoyl chloride                                                          |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |     |      |      |                      |                                                |                                                 |
| Benzoyl chloride                               | C <sub>7</sub> H <sub>5</sub> ClO                                                 | 000098-88-4 | 100 %         | C           |                      | 0/0  | 3/3  | 4/4 | (4) | 0/0  | (4) | (3) | 3/4 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 0/0 | 0/0          | 1/1  | 1/1  | 1/0       | (3)         | 4/4     | 0/0 | 1/0  | (2L) | (2L)                 | 0/0                                            | Benzenecarbonyl chloride; Benzoic acid chloride |
| Benzyl acetate                                 | C <sub>9</sub> H <sub>10</sub> O <sub>2</sub>                                     | 000140-11-4 |               | Xn/Xi       |                      | 1/1  | 1/2  | (2) | 3/4 | 0/0  | 1/2 | (2) | 1/2 | 4/4 | 4/4                | 4/4      | 0/0       | 4/4            | 1/2          | 1/1 | 1/0          | (3)  | (3)  | 1/0       | 4/4         | 0/0     | 1/1 | 1/1  | 1/1  |                      |                                                |                                                 |
| Benzyl alcohol                                 | C <sub>7</sub> H <sub>8</sub> O                                                   | 000100-51-6 |               | Xn          |                      | 3/4  | 4/4  | 4/4 | 4/4 | 0/0  | 4/4 | 1/0 | 4/4 | 4/4 | 4/4                | 2/3      | 0/0       | 4/4            | 1/1          | 1/1 | 1/1          | 1/1  | 3/0  | 1/0       | 4/4         | 0/0     | 1/1 | 1/1  | 1/1  | 3/3                  |                                                |                                                 |
| Benzyl benzoate                                | C <sub>14</sub> H <sub>12</sub> O <sub>2</sub>                                    | 000120-51-4 |               | Xn          |                      | 0/0  | 0/0  | (2) | (3) | 0/0  | (3) | (2) | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 0/0 | (1)          | (2)  | 4/4  | (3)       | 4/4         | 0/0     | (1) | (1)  | (1)  |                      |                                                |                                                 |
| Benzyl chloride                                | C <sub>7</sub> H <sub>7</sub> Cl                                                  | 000100-44-7 | 100 %         | T/Xi        |                      | 0/0  | 4/4  | 1/0 | 4/4 | 0/0  | 4/4 | (2) | 4/4 | 4/4 | 4/4                | 4/4      | 4/4       | 0/0            | 0/0          | (1) | 1/0          | (3)  | 4/4  | 1/0       | 4/4         | 0/0     | 4/4 | 1/1L | 1/1L | 0/0                  |                                                |                                                 |
| Benzyl ether                                   | C <sub>14</sub> H <sub>14</sub> O                                                 | 000103-50-4 |               | Xi          |                      | 0/0  | 0/0  | (2) | (3) | 0/0  | 0/0 | (1) | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 2/0  | 4/4       | 4/4         | 0/0     | (1) | (1)  | (1)  |                      |                                                |                                                 |
| Bismuth chloride                               | BiCl <sub>3</sub>                                                                 | 007787-60-2 |               | Xi          |                      | 1/1  | 1/1  | (3) | (2) | (2)  | 0/0 | (4) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | (2)  | 1/0  | (1)       | (1)         | 0/0     | (4) | 0/0  | 0/0  |                      |                                                |                                                 |
| Bismuth nitrate, basic                         | Bi <sub>5</sub> O(HO) <sub>9</sub> (NO <sub>3</sub> ) <sub>4</sub>                | 001304-85-4 |               | O, Xi       |                      | 1/1  | 1/1  | (3) | (2) | (2)  | 0/0 | (2) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | (2)  | 1/0  | (1)       | (1)         | 0/0     | (3) | 0/0  | 0/0  |                      |                                                |                                                 |
| Bisulfite solution                             | NaHSO <sub>3</sub>                                                                | ??          |               | Xn          |                      | 1/1  | 1/1  | (3) | (3) | 0/0  | 0/0 | 4/4 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 1/0  | 1/1       | 3/0         | 0/0     | (3) | 1/1  | 1/1  | 1/1                  |                                                |                                                 |
| Bisulfite solution, containing SO <sub>2</sub> | NaHSO <sub>3</sub>                                                                | ??          | saturated     | Xn          |                      | 1/1  | 1/1  | (3) | (3) | 0/0  | 0/0 | 4/4 | 1/1 | 0/0 | 0/0                | 1/3      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | (3)  | 1/1       | 4/4         | 0/0     | (3) | 1/1  | 1/1  | 1/1                  |                                                |                                                 |
| Bitter almond oil                              | C <sub>7</sub> H <sub>6</sub> O                                                   | 090320-35-7 |               | Xn          |                      | 1/3  | 3/3  | 3/0 | 4/4 | 4/4  | 1/2 | 1/0 | 1/4 | 4/4 | 3/3                | 4/4      | 4/4       | 1/4            | 1/3          | 1/1 | 1/1          | 1/1  | 3/4  | 4/4       | 4/4         | 0/0     | 1/1 | 1/1  | 1/1  | mainly: benzaldehyde |                                                |                                                 |
| Bitumen                                        | —                                                                                 | 008052-42-4 |               | —           |                      | 0/0  | 0/0  | 1/0 | (2) | (2)  | 0/0 | 2/0 | 1/3 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 4/4  | 1/0       | (3)         | 0/0     | 1/1 | (1)  | (1)  |                      |                                                |                                                 |
| Bone oil                                       | —                                                                                 | 008001-85-2 |               | —           |                      | 0/0  | 0/0  | (1) | (2) | 1/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | (1)  | 4/4  | 1/0       | 1/0         | 0/0     | (1) | 1/1  | 1/1  |                      |                                                |                                                 |
| Boric acid                                     | H <sub>3</sub> BO <sub>3</sub>                                                    | 010043-35-3 | 10 %          | Xi          |                      | 1/1  | 1/1  | 1/0 | 1/1 | 1/0  | 1/1 | 2/3 | 1/1 | 1/2 | 1/0                | 1/3      | 1/0       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 1/2 | 1/1  | 1/1  | 1/1                  |                                                |                                                 |
| Boric acid                                     | H <sub>3</sub> BO <sub>3</sub>                                                    | 010043-35-3 | aqueous       | Xi          |                      | 1/1  | 1/1  | 3/3 | 1/1 | 1/0  | 0/0 | 2/3 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 1/2 | 1/1  | 1/1  | 1/1                  |                                                |                                                 |
| Brake fluid                                    | —                                                                                 | —           |               | ?           |                      | 1/0  | 1/0  | 1/0 | 4/4 | 0/0  | 1/1 | (3) | 1/1 | 3/0 | 0/0                | 1/0      | 3/0       | 4/4            | 0/0          | (1) | 1/td         |      |      |           |             |         |     |      |      |                      |                                                |                                                 |

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| CHEMICALS                    | FORMULA                                                      | CAS-NR.     | CONCENTRATION | HAZARD NOTE | ----- thermoplastics ----- |      |      |     |     |      |     |     |     |     | --- fluoroplastics --- |          |           | --- elastomers --- |              |     | ----- metals ----- |      |      |           | Hastelloy C | COMMENT |     |                      |                      |                            |                                                                                                                                                                   |  |
|------------------------------|--------------------------------------------------------------|-------------|---------------|-------------|----------------------------|------|------|-----|-----|------|-----|-----|-----|-----|------------------------|----------|-----------|--------------------|--------------|-----|--------------------|------|------|-----------|-------------|---------|-----|----------------------|----------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                              |                                                              |             |               |             | FLAMMABLE                  | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU                    | PVC HART | PVC WEICH | SAN                | ECTFE / ETFE | FEP | PTFE               | PVDF | EPDM | FPM / FKM |             |         | NBR | SI                   | AL                   | V2A                        | V4A                                                                                                                                                               |  |
| Carbazole                    | C <sub>12</sub> H <sub>9</sub> N                             | 000086-74-8 |               | Xn          |                            | 1/1  | 1/1  | (2) | 4/4 | 0/0  | 1/1 | (1) | 1/1 | 1/1 | 1/1                    | 4/4      | 4/4       | 0/0                | 4/4          | 1/1 | 1/1                | (2)  | (2)  | (2)       | (3)         | (2)     | 0/0 | (1)                  | (1)                  | (1)                        | 0/0                                                                                                                                                               |  |
| Carbolineum                  | —                                                            | 008001-58-9 | aqueous       | (Xn)        |                            | 1/0  | 1/0  | 1/0 | (3) | 1/0  | 0/0 | 1/0 | 1/0 | 0/0 | 0/0                    | 1/0      | 0/0       | 0/0                | 0/0          | (1) | 1/0                | (2)  | 3/0  | 1/0       | 3/3         | 0/0     | (2) | (1)                  | (1)                  | 0/0                        | Creosote;                                                                                                                                                         |  |
| Carbon dioxide               | CO <sub>2</sub>                                              | 000124-38-9 | saturated     | ?           |                            | 1/3  | 1/1  | 1/0 | 1/0 | 1/1  | 1/0 | 1/1 | 1/1 | 1/0 | 1/0                    | 1/3      | 1/0       | 0/0                | 0/0          | (1) | 1/1                | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 3/3 | 1/1                  | 1/1                  | 1/1                        |                                                                                                                                                                   |  |
| Carbon dioxide, damp         | CO <sub>2</sub>                                              | 000124-38-9 | techn. pure   | ?           |                            | 1/1  | 1/1  | 1/0 | (1) | 1/1  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0                    | 1/3      | 0/0       | 1/1                | 0/0          | (1) | 1/1                | 1/1  | 2/0  | 1/1       | 1/1         | 0/0     | 3/3 | 1/1                  | 1/1                  | 1/1                        |                                                                                                                                                                   |  |
| Carbon dioxide, dry          | CO <sub>2</sub>                                              | 000124-38-9 | techn. pure   | ?           |                            | 1/1  | 1/1  | 1/0 | (1) | 1/1  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0                    | 1/1      | 0/0       | 1/1                | 0/0          | (1) | 1/1                | 1/1  | 2/0  | 1/1       | 1/1         | 0/0     | 3/3 | 1/1                  | 1/1                  | 1/1                        |                                                                                                                                                                   |  |
| Carbon disulfide             | CS <sub>2</sub>                                              | 000075-15-0 |               | F+, T       | X                          | 4/4  | 4/4  | 3/0 | 4/4 | 0/0  | 4/4 | 2/0 | 4/4 | 4/4 | 4/4                    | 4/4      | 4/4       | 4/4                | 1/3          | 1/1 | 1/0                | 1/1  | 4/4  | 1/0       | 4/4         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/0                        |                                                                                                                                                                   |  |
| Carbon tetrabromide          | CBr <sub>4</sub>                                             | 000558-13-4 |               | Xn, Xi      |                            | 0/0  | 0/0  | (3) | 4/4 | 0/0  | 0/0 | (3) | 3/4 | 4/4 | 0/0                    | 0/0      | 0/0       | 0/0                | 0/0          | (1) | (1)                | (2)  | 4/4  | 1/0       | 4/4         | 0/0     | (3) | 0/0                  | 0/0                  | 0/0                        |                                                                                                                                                                   |  |
| Carbon tetrachloride (TETRA) | CCl <sub>4</sub>                                             | 000056-23-5 |               | T           |                            | 4/4  | 4/4  | 4/4 | 4/4 | 1/4  | 4/4 | 2/3 | 4/4 | 4/4 | 4/4                    | 4/4      | 4/4       | 4/4                | 1/1          | 1/1 | 1/1                | 1/3  | 4/4  | 1/1       | 4/4         | 0/0     | 4/4 | (1/1L) <sup>1)</sup> | (1/1L) <sup>1)</sup> | 1/1                        | <sup>1)</sup> Water-free! If even traces of hydrochloric acid (HCl) are split off by moisture, there is a risk of pitting, crevice and stress corrosion cracking. |  |
| Carbon tetrafluoride         | CF <sub>4</sub>                                              | 000075-73-0 |               | ?           |                            | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | 1/0 | (3) | 0/0 | 0/0                    | 0/0      | 0/0       | 0/0                | 0/0          | (1) | 0/0                | 1/0  | 3/0  | 1/0       | 0/0         | (3)     | 0/0 | 0/0                  |                      |                            |                                                                                                                                                                   |  |
| Carbonyl chloride            | -> see: Phosgene                                             |             |               |             |                            |      |      |     |     |      |     |     |     |     |                        |          |           |                    |              |     |                    |      |      |           |             |         |     |                      |                      |                            |                                                                                                                                                                   |  |
| Carnauba wax                 | —                                                            | 008015-86-9 |               | —           |                            | 1/1  | 1/1  | 1/1 | (1) | 1/0  | 0/0 | (1) | 1/1 | 0/0 | 0/0                    | 0/0      | 0/0       | 1/1                | 0/0          | 1/1 | 1/1                | (1)  | (3)  | (1)       | (1)         | 0/0     | 1/1 | (1)                  | (1)                  |                            |                                                                                                                                                                   |  |
| Castor oil                   | —                                                            | 008001-79-4 | 100 %         | Xi          |                            | 1/1  | 1/1  | 1/0 | 1/0 | (1)  | 1/0 | (2) | 1/1 | 1/1 | 0/0                    | 1/0      | 3/0       | 1/1                | 0/0          | (1) | 1/1                | 1/1  | 3/0  | 1/0       | 1/0         | 0/0     | (1) | 1/1                  | 1/1                  | 1/1                        |                                                                                                                                                                   |  |
| Caustic potash               | -> see: Potassium hydroxide                                  |             |               |             |                            |      |      |     |     |      |     |     |     |     |                        |          |           |                    |              |     |                    |      |      |           |             |         |     |                      |                      |                            |                                                                                                                                                                   |  |
| Cedar wood oil               | —                                                            | 008000-27-9 |               | ?           |                            | 3/4  | 4/4  | (2) | 2/3 | 0/0  | 4/4 | (2) | 4/4 | 4/4 | 3/3                    | 3/4      | 0/0       | 0/0                | 1/2          | 1/1 | (1)                | (2)  | (4)  | (2)       | (3)         | 0/0     | (1) | (1)                  | (1)                  |                            |                                                                                                                                                                   |  |
| Cesium bromide               | CsBr                                                         | 007787-69-1 |               | Xi          |                            | 1/1  | 1/1  | (2) | (2) | (2)  | 0/0 | (1) | 1/1 | 0/0 | 0/0                    | 0/0      | 0/0       | 1/1                | 1/1          | 1/1 | 1/1                | (1)  | (1)  | (2)       | (1)         | 0/0     | (2) | 0/0                  | 0/0                  |                            |                                                                                                                                                                   |  |
| Cetyl alcohol                | C <sub>18</sub> H <sub>34</sub> O                            | 036653-82-4 | 100 %         | Xi          |                            | 1/1  | 1/1  | 4/4 | (2) | 1/0  | 0/0 | (1) | 1/1 | 0/0 | 1/0                    | 1/1      | 3/3       | 1/1                | 1/1          | 1/1 | 1/1                | 1/1  | 1/0  | 1/0       | 1/0         | 0/0     | (1) | 1/1                  | 1/1                  |                            |                                                                                                                                                                   |  |
| Chalk                        | CaCO <sub>3</sub>                                            | —           |               | —           |                            | 1/1  | 1/1  | 1/1 | 1/1 | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1                    | 1/1      | 1/1       | 1/1                | 1/1          | 1/1 | 1/1                | 1/1  | 1/1  | 1/1       | 1/1         | 1/1     | 1/1 | 1/1                  | 1/1                  |                            | calcium carbonate                                                                                                                                                 |  |
| Chloral hydrate              | C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub> O <sub>2</sub> | 000302-17-0 | techn. pure   | T/Xi        |                            | 3/3  | 3/3  | 4/4 | (3) | (4)  | 0/0 | (3) | 3/4 | 0/0 | 0/0                    | 4/4      | 4/4       | 0/0                | (1)          | 1/1 | 4/4                | 3/0  | 3/4  | 4/4       | 0/0         | 4/4     | 0/0 | 0/0                  | 0/0                  | 0/0                        |                                                                                                                                                                   |  |
| Chloramine-T                 | C <sub>2</sub> H <sub>3</sub> ClNaNSO <sub>2</sub>           | 000127-65-1 | diluted       | Xi          |                            | 1/0  | 1/0  | 4/4 | 1/0 | 0/0  | 0/0 | (3) | (3) | 0/0 | 0/0                    | 0/0      | 1/0       | 0/0                | 0/0          | (1) | 1/0                | 3/4  | 1/0  | 4/4       | 1/0         | 0/0     | 3/4 | 2/2                  | 1/1                  | 0/0                        |                                                                                                                                                                   |  |
| Chloric acid                 | HClO <sub>3</sub>                                            | 007790-93-4 | 1 %           | (C)         |                            | 0/0  | 1/1  | 4/4 | (3) | 0/0  | 0/0 | (3) | 1/3 | 0/0 | 0/0                    | 1/3      | 1/0       | 0/0                | 0/0          | 0/0 | 1/1                | 1/1  | 3/0  | 1/1       | (3)         | 0/0     | (3) | 4/4                  | 4/4                  | 1/1                        |                                                                                                                                                                   |  |
| Chloric acid                 | HClO <sub>3</sub>                                            | 007790-93-4 | 10 %          | (O), C      |                            | 1/0  | 0/0  | 4/4 | (3) | 0/0  | 0/0 | 4/4 | 4/4 | 0/0 | 0/0                    | 1/3      | 0/0       | 0/0                | 0/0          | 1/1 | 1/1                | 3/0  | 3/0  | 4/4       | 0/0         | 4/4     | 4/4 | 4/4                  | 4/4                  | 1/1                        |                                                                                                                                                                   |  |
| Chloric acid                 | HClO <sub>3</sub>                                            | 007790-93-4 | 20 %          | (O), C      |                            | 3/0  | 1/4  | 4/4 | (3) | (4)  | 0/0 | 4/4 | 1/4 | 0/0 | 0/0                    | 1/3      | 0/0       | 0/0                | 0/0          | 0/0 | 1/1                | 1/0  | 3/0  | 3/0       | 4/4         | 0/0     | 4/4 | 4/4                  | 4/4                  | ?                          |                                                                                                                                                                   |  |
| Chloric acid, sodium salt    | -> see: Sodium chlorate                                      |             |               |             |                            |      |      |     |     |      |     |     |     |     |                        |          |           |                    |              |     |                    |      |      |           |             |         |     |                      |                      |                            |                                                                                                                                                                   |  |
| Chlorine                     | Cl <sub>2</sub>                                              | 007782-50-5 | 10 % wet      | T           |                            | 3/4  | 3/4  | 4/4 | 2/3 | 4/4  | 2/4 | 4/4 | 4/4 | 4/4 | 4/4                    | 1/2      | 0/0       | 4/4                | 1/1          | 1/1 | 1/1                | (2)  | 2/0  | 3/0       | 4/4         | 0/0     | 4/4 | 4/4                  | 4/4                  | 0/0                        |                                                                                                                                                                   |  |
| Chlorine                     | Cl <sub>2</sub>                                              | 007782-50-5 | 97 %          | T           |                            | 4/4  | 4/4  | 4/4 | 4/4 | 4/4  | 4/4 | 4/4 | 4/4 | 4/4 | 4/4                    | 4/4      | 4/4       | 4/4                | 0/0          | 1/1 | 1/0                | 1/1  | 4/4  | 1/1       | 4/4         | 0/0     | (3) | 1/0                  | 1/0                  | 1/1                        |                                                                                                                                                                   |  |
| Chlorine                     | Cl <sub>2</sub>                                              | 007782-50-5 | steam         | T           |                            | 4/4  | 4/4  | 4/4 | 4/4 | 4/4  | 4/4 | 4/4 | 4/4 | 4/4 | 4/4                    | 4/4      | 4/4       | 4/4                | 0/0          | 1/1 | 1/0                | 1/1  | 4/4  | 1/1       | 4/4         | 0/0     | (3) | 1/0                  | 1/0                  |                            |                                                                                                                                                                   |  |
| Chlorine dioxide             | ClO <sub>2</sub>                                             | 010049-04-4 |               | E, T        |                            | 1/1  | 1/1  | 4/4 | 1/1 | 1/1  | 2/2 | 2/2 | 2/2 | 3/3 | 3/3                    | 2/2      | 2/2       | 3/3                | 1/1          | 1/1 | 1/1                | 2/2  | 4/4  | 2/2       | 4/4         | 1/1     | 4/4 | 3/3                  | 3/3                  | 1/1                        |                                                                                                                                                                   |  |
| Chlorine trifluoride         | ClF <sub>3</sub>                                             | 007790-91-2 |               | (O, T)      |                            | 0/0  | 0/0  | 4/4 | (4) | 4/4  | (4) | 4/4 | (4) | 0/0 | 0/0                    | 0/0      | 0/0       | 0/0                | 0/0          | (2) | (4)                | 4/4  | (4)  | 4/4       | 0/0         | (4)     | (4) | (4)                  | (4)                  |                            |                                                                                                                                                                   |  |
| Chlorine water               | Cl <sub>2</sub> x H <sub>2</sub> O                           | 007782-50-5 |               | (T)         |                            | 3/0  | 0/4  | 4/4 | 4/4 | 4/4  | 4/4 | 4/4 | 3/4 | 4/4 | 0/0                    | 3/3      | 3/0       | 3/3                | 1/1          | (1) | 1/1                | 1/1  | 3/0  | 1/0       | 4/4         | 0/0     | 4/4 | 2/0L                 | 2/0L                 | 0/0                        |                                                                                                                                                                   |  |
| Chloro acetophenone, p-      | C <sub>6</sub> H <sub>4</sub> ClO                            | 000099-91-2 |               | (Xn)        |                            | 1/1  | 1/1  | (2) | 4/4 | 0/0  | 1/1 | (2) | 1/1 | 4/4 | 4/4                    | 4/4      | 0/0       | 0/0                | 1/1          | 1/1 | (2)                | (2)  | (3)  | 4/4       | 4/4         | 0/0     | (1) | 0/0                  | 0/0                  |                            |                                                                                                                                                                   |  |
| Chloro-1-propene, 3-         | -> see: Allyl chloride                                       |             |               |             |                            |      |      |     |     |      |     |     |     |     |                        |          |           |                    |              |     |                    |      |      |           |             |         |     |                      |                      |                            |                                                                                                                                                                   |  |
| Chloro-2-propanone, 1-       | -> see: Chloroacetone                                        |             |               |             |                            |      |      |     |     |      |     |     |     |     |                        |          |           |                    |              |     |                    |      |      |           |             |         |     |                      |                      |                            |                                                                                                                                                                   |  |
| Chloroacetic acid            | C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>               | 000079-11-8 | 50 %          | T, C        |                            | 1/3  | 1/3  | 4/4 | (4) | 4/4  | 0/0 | 4/4 | 1/1 | 0/0 | 0/0                    | 1/0      | 0/0       | 3/4                | 0/0          | (1) | 1/1                | 1/4  | 2/0  | 3/0       | 4/4         | 0/0     | 4/4 | 2/4                  | 2/4                  | 1/4                        |                                                                                                                                                                   |  |
| Chloroacetic acid            | C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>               | 000079-11-8 |               | T, C        |                            | 1/1  | 1/1  | 4/4 | 3/4 | 4/4  | 1/2 | 4/4 | 1/2 | 2/4 | 4/4                    | 3/4      | 4/4       | 3/4                | 1/1          | 1/1 | 1/1                | 4/4  | 3/0  | 3/0       | 4/4         | 0/0     | 4/4 | 4/4                  | 4/4                  | 4/4                        |                                                                                                                                                                   |  |
| Chloroacetone                | C <sub>3</sub> H <sub>5</sub> ClO                            | 000078-95-5 |               | (F, Xi)     | X                          | 0/0  | 0/0  | (3) | (4) | (4)  | (4) | (3) | (2) | 0/0 | 0/0                    | 0/0      | 0/0       | 0/0                | 0/0          | 0/0 | (2)                | (3)  | 1/0  | 4/4       | 4/4         | 0/0     | (4) | 0/0                  | 0/0                  | 0/0                        | Chloro-2-propanone, 1-; Acetonyl chloride; Monochloroacetone                                                                                                      |  |
| Chlorobenzene                | C <sub>6</sub> H <sub>5</sub> Cl                             | 000108-90-7 |               | Xn          | X                          | 3/4  | 3/4  | 4/4 | 4/4 | 1/4  | 4/4 | 1/0 | 3/4 | 4/4 | 4/4                    | 4/4      | 4/4       | 4/4                | 1/1          | 1/1 | 1/1                | 1/1  | 4/4  | 3/4       | 4/4         | 0/0     | 1/1 | (1/1) <sup>1)</sup>  | (1/1) <sup>1)</sup>  | 1/1                        | <sup>1)</sup> Water-free! If even traces of hydrochloric acid (HCl) are split off by moisture, there is a risk of pitting, crevice and stress corrosion cracking. |  |
| Chlorodifluoroethane         | C <sub>2</sub> H <sub>2</sub> ClF <sub>2</sub>               | 000075-68-3 |               | ?           |                            | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | 1/0 | (3) | 0/0 | 0/0                    | 0/0      | 0/0       | 0/0                | 0/0          | (1) | 0/0                | 1/0  | 4/4  | 1/0       | 0/0         | (3)     | 0/0 | 0/0                  |                      |                            |                                                                                                                                                                   |  |
| Chlorodifluoromethane        | CHClF <sub>2</sub>                                           | 000075-45-6 |               | N, Xn       |                            | 0/0  | 3/0  | 1/0 | 3/0 | 1/0  | 0/0 | 1/0 | 4/4 | 4/4 | 4/4                    | 2/0      | 4/4       | 0/0                | 0/0          | 3/3 | 1/0                | (3)  | 1/0  | 4/4       | 4/4         | 0/0     | (3) | 0/0                  | 0/0                  |                            | R 22                                                                                                                                                              |  |
| Chloroethane, 1-             | -> see: Monochloroethane                                     |             |               |             |                            |      |      |     |     |      |     |     |     |     |                        |          |           |                    |              |     |                    |      |      |           |             |         |     |                      |                      |                            |                                                                                                                                                                   |  |
| Chloroethyl alcohol, 2-      | C <sub>2</sub> H <sub>5</sub> ClO                            | 000107-07-3 | techn. pure   | T+          |                            | 1/1  | 0/0  | 4/4 | 4/4 | 0/0  | 0/0 | 3/4 | 4/4 | 0/0 | 0/0                    | 4/4      | 0/0       | 0/0                | 0/0          | 1/1 | 1/0                | 1/3  | 3/0  | 4/4       | 4/4         | 0/0     | (3) | 1/0L                 | 1/0L                 | 1/0                        |                                                                                                                                                                   |  |
| Chloroethylene               | -> see: Vinyl chloride (VCM)                                 |             |               |             |                            |      |      |     |     |      |     |     |     |     |                        |          |           |                    |              |     |                    |      |      |           |             |         |     |                      |                      |                            |                                                                                                                                                                   |  |
| Chlorofluorocarbons (CFC)    | —                                                            | —           |               | N           |                            | 0/0  | 0/0  | (2) | (3) | 0/0  | 0/0 | 1/0 | (3) | 4/4 | 0/0                    | 0/0      | 0/0       | 0/0                | 0/0          | (1) | (3)                | (3)  | 0/0  | (3)       | 0/0         | (3)     | 0/0 | 0/0                  |                      | resistance depends on type |                                                                                                                                                                   |  |
| Chlorofluoromethane          | CH <sub>2</sub> ClF                                          | 000593-70-4 |               | N           |                            | 0    |      |     |     |      |     |     |     |     |                        |          |           |                    |              |     |                    |      |      |           |             |         |     |                      |                      |                            |                                                                                                                                                                   |  |

| CHEMICALS                 | FORMULA                                                 | CAS-NR.     | CONCENTRATION | HAZARD NOTE | FLAMMABLE | thermoplastics ----- |      |     |     |      |      |     |     |     |     |          |           |     |              | fluoroplastics --- |      |      |      | elastomers --- |     |     |     | metals ----- |     |                                       |                                    | Hastelloy C | COMMENT |
|---------------------------|---------------------------------------------------------|-------------|---------------|-------------|-----------|----------------------|------|-----|-----|------|------|-----|-----|-----|-----|----------|-----------|-----|--------------|--------------------|------|------|------|----------------|-----|-----|-----|--------------|-----|---------------------------------------|------------------------------------|-------------|---------|
|                           |                                                         |             |               |             |           | HDPE                 | LDPE | PA  | PC  | PETG | PMPP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN | ECTFE / ETFE | FEP                | PTFE | PVDF | EPDM | FPM / FKM      | NBR | SI  | AL  | V2A          | V4A |                                       |                                    |             |         |
| Chloronaphthalene, 1-     | C <sub>10</sub> H <sub>7</sub> Cl                       | 000090-13-1 |               | Xn          |           | 0/0                  | 0/0  | (2) | (3) | 0/0  | 0/0  | (2) | 4/4 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | (1)                | 1/1  | 4/4  | 1/0  | 4/4            | 0/0 | (2) | 1/0 | 1/0          |     |                                       |                                    |             |         |
| Chloropentafluoroethane   | C <sub>2</sub> ClF <sub>5</sub>                         | 000076-15-3 |               | ?           |           | 0/0                  | 0/0  | 1/0 | (3) | 0/0  | 0/0  | 1/0 | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 0/0  | 1/0  | 3/0  | 1/0            | 0/0 | (3) | 0/0 | 0/0          |     |                                       |                                    |             |         |
| Chloroprene               | C <sub>2</sub> H <sub>3</sub> Cl                        | 000126-99-8 |               | F, Xn       | X         | 0/0                  | 0/0  | (2) | (3) | 0/0  | (4)  | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | (1)                | (2)  | 4/4  | 3/4  | 4/4            | 0/0 | (3) | 0/0 | 0/0          |     |                                       |                                    |             |         |
| Chloropropylene, 3-       | -> see: Allyl chloride                                  |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |     |                                       |                                    |             |         |
| Chlorosulfonic acid       | ClHSO <sub>3</sub>                                      | 007790-94-5 | techn. pure   | C+          |           | 4/4                  | 4/4  | 4/4 | 4/4 | 4/4  | 4/4  | 4/4 | 4/4 | 4/4 | 4/4 | 3/0      | 4/4       | 4/4 | 0/0          | 0/0                | 1/0  | 3/4  | 4/4  | 4/4            | 4/4 | 0/0 | 3/3 | 3/4          | 3/4 | 1/0                                   |                                    |             |         |
| Chlorotoluene             | C <sub>7</sub> H <sub>7</sub> Cl                        | —           |               | Xn          |           | 0/0                  | 0/0  | (2) | 4/4 | 0/0  | (4)  | (1) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/0  | 1/1  | 4/4  | 1/0            | 4/4 | 0/0 | (3) | 1/0          | 1/0 | 1/1                                   | isomer not indicated in the source |             |         |
| Chlorotrifluoromethane    | CClF <sub>3</sub>                                       | 000075-72-9 |               | ?           |           | 0/0                  | 0/0  | 1/0 | (3) | 0/0  | 0/0  | 1/0 | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 0/0  | 1/0  | 3/0  | 1/0            | 0/0 | (3) | 0/0 | 0/0          | 0/0 |                                       |                                    |             |         |
| Chromic acid              | CrO <sub>3</sub>                                        | 001333-82-0 | 10 %          | O, T, C, N  |           | 1/1                  | 1/1  | 4/4 | 2/3 | 3/0  | 1/1  | 4/4 | 1/1 | 1/1 | 4/4 | 1/2      | 0/0       | 0/3 | 1/1          | 1/1                | 1/1  | 1/1  | 4/4  | 1/1            | 4/4 | 0/0 | 1/3 | 1/2          | 1/2 | 1/1                                   | Chromium trioxide;                 |             |         |
| Chromic acid              | CrO <sub>3</sub>                                        | 001333-82-0 | 20 %          | O, T, C, N  |           | 0/0                  | 1/3  | 4/4 | 3/4 | (4)  | 0/0  | 4/4 | 3/3 | 1/0 | 1/0 | 1/0      | 1/0       | 0/0 | 0/0          | 1/1                | 1/1  | 1/1  | 4/4  | 1/1            | 4/4 | 0/0 | 1/3 | (2)          | (2) | 1/1                                   |                                    |             |         |
| Chromic acid              | CrO <sub>3</sub>                                        | 001333-82-0 | 50 %          | O, T, C, N  |           | 3/4                  | 3/4  | 4/4 | 3/4 | (4)  | 2/3  | 4/4 | 3/3 | 3/3 | 4/4 | 1/3      | 1/0       | 3/3 | 1/1          | 1/1                | 1/1  | 1/1  | 4/4  | 1/0            | 4/4 | 0/0 | (3) | 2/3          | 2/3 | 1/1                                   |                                    |             |         |
| Chromic potassium sulfate | KCr(SO <sub>4</sub> ) <sub>2</sub> x 12H <sub>2</sub> O | 007788-99-0 | saturated     | Xn          |           | 1/1                  | 0/0  | (2) | 1/0 | (2)  | 0/0  | (3) | 1/1 | 0/0 | 0/0 | 1/1      | 0/0       | 0/0 | 1/1          | 1/1                | 1/1  | 1/1  | 1/0  | 1/0            | 1/1 | 0/0 | (3) | 1/3          | 1/3 | 1/1                                   |                                    |             |         |
| Chromic-sulfuric acid     | CrO <sub>3</sub> + H <sub>2</sub> SO <sub>4</sub>       | 065272-71-1 | concentrated  | O, T, C, N  |           | 4/4                  | 4/4  | 4/4 | 4/4 | 4/4  | 4/4  | 4/4 | 4/4 | 4/4 | 0/0 | 0/0      | 4/4       | 4/4 | 1/1          | 0/0                | 1/1  | 4/4  | 4/4  | 1/0            | 4/4 | 4/4 | 4/4 | 2/3          | 2/3 | 0/0                                   |                                    |             |         |
| Chromium salts            | —                                                       | —           | each          | T/Xn        |           | 0/0                  | 0/0  | 0/0 | (2) | (2)  | 0/0  | (3) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | (1)  | (1)  | (1)            | (1) | 0/0 | K   | K            | K   |                                       |                                    |             |         |
| Chromium trioxide         | -> see: Chromic acid                                    |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |     |                                       |                                    |             |         |
| Cinnamaldehyde            | C <sub>9</sub> H <sub>8</sub> O                         | 000104-55-2 |               | Xn, Xi      |           | 0/0                  | 0/0  | (2) | (3) | 0/0  | (4)  | (2) | (3) | 4/4 | 0/0 | 0/0      | 0/0       | 4/4 | 0/0          | (1)                | (1)  | (2)  | 1/0  | 1/0            | 4/4 | 0/0 | (1) | (1)          | (1) |                                       |                                    |             |         |
| Cinnamon                  | —                                                       | —           | ground        | ?           |           | 0/0                  | 0/0  | (2) | 1/0 | (2)  | 0/0  | (2) | (2) | 3/0 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | (1)                | (1)  | (1)  | (2)  | (2)            | (2) | 0/0 | (1) | (1)          | (1) |                                       |                                    |             |         |
| Cinnamon oil              | —                                                       | 008007-80-5 |               | Xn, Xi      |           | 3/4                  | 4/4  | (2) | 2/3 | 0/0  | 4/4  | (2) | 4/4 | 4/4 | 3/3 | 4/4      | 0/0       | 0/0 | 1/2          | 1/1                | (1)  | (2)  | (3)  | (3)            | 4/4 | 0/0 | (1) | (1)          | (1) |                                       |                                    |             |         |
| Citric acid               | C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>            | 000077-92-9 | 10 %          | Xi          |           | 1/1                  | 1/1  | 1/1 | 1/2 | 1/3  | 1/1  | 2/4 | 1/1 | 1/2 | 1/1 | 1/3      | 1/0       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 1/0  | 1/1            | 1/1 | 0/0 | 1/0 | 1/1          | 1/1 | 1/1                                   |                                    |             |         |
| Citric acid               | C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>            | 000077-92-9 | 50 %          | Xi          |           | 1/1                  | 1/1  | 3/0 | 1/0 | 0/0  | 1/0  | 2/0 | 1/1 | 1/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | 1/1  | 1/0  | (1)            | 1/1 | 0/0 | 1/0 | 1/3          | 1/2 | 1/1                                   |                                    |             |         |
| Citric acid               | C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>            | 000077-92-9 | saturated     | Xi          |           | 1/1                  | 1/1  | 3/0 | 1/0 | 0/0  | 1/0  | 2/0 | 1/1 | 1/1 | 0/0 | 1/1      | 1/1       | 0/0 | 1/1          | 1/1                | 1/1  | 1/0  | (1)  | 1/1            | 0/0 | 1/0 | 1/3 | 1/2          | 1/1 |                                       |                                    |             |         |
| Citrus juices             | —                                                       | —           | aqueous       | —           |           | 1/1                  | 1/1  | 1/0 | 1/0 | 1/0  | 0/0  | 1/0 | 1/1 | 0/0 | 0/0 | 1/1      | 1/1       | 0/0 | 0/0          | 1/1                | 1/1  | 1/1  | (1)  | 1/0            | 1/1 | 0/0 | (2) | 1/1          | 1/1 |                                       |                                    |             |         |
| Cleaning agents           | —                                                       | —           | ?             | ?           |           | 1/1                  | 1/1  | 1/0 | 1/1 | 1/1  | 0/0  |     | 1/1 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 1/0  | 1/1            | (2) | 0/0 | 1/1 | 1/1          | 1/1 |                                       |                                    |             |         |
| Clophen A60               | —                                                       | 011096-82-5 |               | Xn, N       |           | 0/0                  | 0/0  | 1/0 | (3) | 0/0  | 0/0  | (2) | 4/4 | 0/0 | 0/0 | 4/4      | 0/0       | 0/0 | 0/0          | (1)                | (2)  | 4/4  | 2/3  | 4/4            | 0/0 | 1/0 | 1/0 | 1/0          | 0/0 | polychlorinated Biphenyls, PCB; Bayer |                                    |             |         |
| Coal gas, without benzene | —                                                       | —           |               | F+, T       | X         | 1/0                  | 1/0  | 1/0 | 1/0 | (2)  | 1/0  | (2) | 1/0 | 1/0 | 0/0 | 1/0      | 1/0       | 0/0 | 0/0          | (1)                | 1/0  | 1/0  | 4/4  | 1/0            | 3/0 | 0/0 | 1/1 | 1/1          | 1/1 | 0/0                                   |                                    |             |         |
| Cobalt dichloride         | CoCl <sub>2</sub>                                       | 007646-79-9 | aqueous       | Xn          |           | 1/1                  | 1/1  | (2) | (2) | (2)  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | (1)  | 1/0  | 1/0            | 1/0 | 0/0 | (3) | 0/0          | 0/0 |                                       |                                    |             |         |
| Cocoa                     | —                                                       | —           | (—)           | (—)         |           | 1/1                  | 1/1  | (2) | (1) | (2)  | 0/0  | 1/1 | (2) | 1/1 | 0/0 | 0/0      | 0/0       | 0/0 | 1/1          | 1/1                | (1)  | (1)  | (2)  | (1)            | (2) | 0/0 | (1) | (1)          | (1) |                                       |                                    |             |         |
| Cocoa butter              | —                                                       | 008002-31-1 |               | —           |           | 0/0                  | 0/0  | 1/0 | (1) | 1/0  | 0/0  | 1/1 | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | (1)  | 4/4  | 1/0  | 4/4            | 0/0 | (1) | 1/1 | 1/1          |     |                                       |                                    |             |         |
| Coconut butter            | —                                                       | —           |               | —           |           | 0/0                  | 0/0  | 1/0 | (2) | 1/0  | 0/0  | (2) | (2) | 1/1 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | (1)                | 1/1  | 1/1  | 4/4  | 1/1            | 1/0 | 0/0 | (1) | 1/1          | 1/1 |                                       |                                    |             |         |
| Coconut fatty alcohol     | —                                                       | 068425-37-6 | techn. pure   | (Xi)        |           | 1/0                  | 0/0  | (1) | (2) | 1/0  | 0/0  | (2) | 1/3 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 3/0  | 1/1            | 1/1 | 0/0 | (1) | 1/1          | 1/1 |                                       |                                    |             |         |
| Coconut oil               | —                                                       | 008001-31-8 | techn. pure   | —           |           | 1/3                  | 1/3  | 1/0 | (2) | 1/0  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 4/4  | 1/1            | 1/1 | 0/0 | (1) | 1/1          | 1/1 |                                       |                                    |             |         |
| Cod-liver oil             | —                                                       | 008001-69-2 |               | —           |           | 1/3                  | 1/3  | (2) | 1/0 | (2)  | 0/0  | (2) | 1/3 | 1/1 | 0/0 | 1/0      | 0/0       | 1/1 | 0/0          | (1)                | 1/1  | 1/1  | 3/0  | 1/0            | 1/0 | 0/0 | 1/0 | (1)          | (1) | 1/1                                   |                                    |             |         |
| Colza oil                 | —                                                       | 008002-13-9 |               | —           |           | 0/0                  | 0/0  | (2) | (2) | 1/0  | 0/0  | (2) | 1/3 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 1/0  | 1/0            | 1/3 | 0/0 | (1) | 1/1          | 1/1 |                                       |                                    |             |         |
| Compressed air            | —                                                       | —           | oleaginous    | —           |           | 1/0                  | 0/0  | (2) | (2) | (1)  | 0/0  | (1) | 3/0 | 0/0 | 0/0 | 3/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | (3)  | (1)            | (2) | 0/0 | 1/1 | 1/1          | 1/1 |                                       |                                    |             |         |
| Condy's crystals          | -> see: Potassium permanganate                          |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |     |                                       |                                    |             |         |
| Copper acetate            | C <sub>4</sub> H <sub>6</sub> CuO <sub>4</sub>          | 004180-12-5 | aqueous       | Xn          |           | 1/1                  | 1/1  | (3) | (2) | (2)  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 1/0  | (3)            | 3/3 | 0/0 | 4/4 | 1/1          | 1/1 | 1/1                                   | verdigris                          |             |         |
| Copper sulfate            | CuSO <sub>4</sub> x 5H <sub>2</sub> O                   | 007758-99-8 | aqueous       | Xn          |           | 1/1                  | 1/1  | 1/0 | 1/0 | (2)  | 1/0  | 1/0 | 1/1 | 1/1 | 1/0 | 1/3      | 1/0       | 1/1 | 1/1          | (1)                | 1/1  | 1/1  | 1/0  | 1/1            | 2/0 | 0/0 | 4/4 | 1/1          | 1/1 | 1/1                                   | blue stone                         |             |         |
| Cotton oil                | —                                                       | 008001-29-4 | techn. pure   | ?           |           | 0/0                  | 0/0  | 1/0 | (2) | (2)  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | (1)  | 3/0  | 1/0            | 1/0 | 0/0 | (1) | 1/1          | 1/1 |                                       |                                    |             |         |
| Creosote                  | —                                                       | —           |               | (T)         |           | 1/1                  | 1/1  | 3/0 | (3) | 0/0  | 0/0  | (3) | 3/4 | 0/0 | 1/0 | 3/0      | 4/4       | 0/0 | 0/0          | (1)                | 1/1  | (3)  | 4/4  | (3)            | 1/0 | 0/0 | (2) | 1/1          | 1/1 | 0/0                                   |                                    |             |         |
| Creosote                  | -> see: Carbolineum                                     |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |     |                                       |                                    |             |         |
| Cresol (-mixtures)        | C <sub>7</sub> H <sub>8</sub> O                         | 001319-77-3 |               | T, C        |           | 3/4                  | 4/4  | 4/4 | 4/4 | 4/4  | 4/4  | 4/4 | 2/3 | 4/4 | 4/4 | 4/4      | 4/4       | 3/4 | 1/2          | 1/1                | 1/1  | 1/1  | 4/4  | 1/0            | 4/4 | 0/0 | 1/1 | 1/0          | 1/0 | 1/1                                   |                                    |             |         |
| Crotonaldehyde            | C <sub>4</sub> H <sub>6</sub> O                         | 004170-30-3 | techn. pure   | F, T        | X         | 1/0                  | 0/0  | (2) | (4) | 0/0  | (4)  | (2) | 1/0 | 0/0 | 0/0 | 4/4      | 0/0       | 0/0 | 0/0          | (1)                | 1/0  | 1/3  | 1/0  | 3/0            | 4/4 | 0/0 | 1/0 | 1/1          | 1/1 | 0/0                                   |                                    |             |         |
| Crude oil                 | —                                                       | —           | 100 %         | (N)         |           | 0/0                  | 1/3  | 1/0 | (3) | 1/0  | 0/0  | 1/0 | 1/3 | 3/0 | 1/0 | 1/0      | 3/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 4/4  | 1/0            | 3/3 | 0/0 | (2) | (1)          | (1) |                                       |                                    |             |         |
| Cumene                    | C <sub>9</sub> H <sub>12</sub>                          | 000098-82-8 |               | Xi          | X         | 2/3                  | 3/4  | (2) | 4/4 | 0/0  | 4/4  | (2) | 3/4 | 4/4 | 4/4 | 0/0      | 0/0       | 1/2 | 1/1          | (1)                | (2)  | 4/4  | 1/0  | 4/4            | 0/0 | 1/1 | 1/1 | 1/1          | 0/0 |                                       |                                    |             |         |
| Cupric chloride           | CuCl <sub>2</sub>                                       | 007447-39-4 | saturated     | Xn          |           | 1/3                  | 1/1  | (3) | 1/0 | (2)  | 1/0  | (2) | 1/3 | 0/0 | 0/0 | 1/1      | 1/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 1/0  | 1/1            | 1/0 | 0/0 | 4/4 | 4/4          | 4/4 | 1/1                                   |                                    |             |         |
| Cupric nitrate            | Cu(NO <sub>3</sub> ) <sub>2</sub>                       | 003251-23-8 | saturated     | O, Xn       |           | 1/1                  | 1/1  | 1/0 | (2) | (2)  | 1/0  | 1/0 | 1/1 | 1/0 | 0/0 | 1/0      | 1/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 1/0  | 1/1            | 4/4 | 0/0 | 4/4 | 1/1          | 1/1 | 1/1                                   |                                    |             |         |
| Cupric nitrate            | Cu(NO <sub>3</sub> ) <sub>2</sub>                       | 003251-23-8 | aqueous       | O, Xn       |           | 0/0                  | 0/0  | (3) | (2) | (2)  | 0/0  | 1/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 1/0  | 1/1            | 1/  |     |     |              |     |                                       |                                    |             |         |



| CHEMICALS                     | FORMULA                                                                          | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics |      |      |     |     |      |     |     |     |     |     |          |           |     | fluoroplastics |     |      |      | elastomers |           |     |     | metals |      |      |                                                  | Hastelloy C                        | COMMENT |                                  |
|-------------------------------|----------------------------------------------------------------------------------|-------------|---------------|-------------|----------------|------|------|-----|-----|------|-----|-----|-----|-----|-----|----------|-----------|-----|----------------|-----|------|------|------------|-----------|-----|-----|--------|------|------|--------------------------------------------------|------------------------------------|---------|----------------------------------|
|                               |                                                                                  |             |               |             | FLAMMABLE      | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN | ECTFE / ETFE   | FEP | PTFE | PVDF | EPDM       | FPM / FKM | NBR | SI  | AL     | V2A  | V4A  |                                                  |                                    |         |                                  |
| Cyclanon                      | —                                                                                | —           |               | (Xn, Xi)    |                | 1/1  | 1/1  | 1/0 | (2) | (1)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | 0/0 | (1)  | 1/1  | (1)        | (2)       | (2) | 1/1 | 0/0    | 3/4  | (1)  | 1/1                                              | 1/1                                | 0/0     | appliances for dyeing-mill; BASF |
| Cyclohexane                   | C <sub>6</sub> H <sub>12</sub>                                                   | 000110-82-7 |               | F           | X              | 3/4  | 3/4  | 1/0 | 3/3 | 1/0  | 4/4 | 1/1 | 3/4 | 4/4 | 4/4 | 2/3      | 1/0       | 1/3 | 1/2            | 1/1 | 1/1  | 1/1  | 4/4        | 1/0       | 1/0 | 0/0 | 1/1    | 1/1  | 1/1  | 0/0                                              |                                    |         |                                  |
| Cyclohexanol                  | C <sub>6</sub> H <sub>12</sub> O                                                 | 000108-93-0 | techn. pure   | Xn          |                | 1/1  | 1/1  | 1/1 | 3/0 | 0/0  | 1/2 | 1/0 | 1/3 | 3/3 | 1/0 | 1/1      | 4/4       | 1/3 | 0/0            | (1) | 1/1  | 1/3  | 4/4        | 4/4       | 3/3 | 0/0 | 1/1    | (1)  | (1)  | 0/0                                              |                                    |         |                                  |
| Cyclohexanone                 | C <sub>6</sub> H <sub>10</sub> O                                                 | 000108-94-1 | techn. pure   | Xn          | X              | 1/3  | 3/4  | 1/0 | 4/4 | (4)  | 3/4 | 1/0 | 2/4 | 4/4 | 4/4 | 4/4      | 4/4       | 4/4 | 0/0            | (1) | 1/1  | 1/3  | 4/4        | 4/4       | 4/4 | 0/0 | 1/0    | (1)  | (1)  | 0/0                                              |                                    |         |                                  |
| Cyclohexatriene               | -> see: Benzene                                                                  |             |               |             |                |      |      |     |     |      |     |     |     |     |     |          |           |     |                |     |      |      |            |           |     |     |        |      |      |                                                  |                                    |         |                                  |
| Cymene, p-                    | C <sub>10</sub> H <sub>14</sub>                                                  | 000099-87-6 |               | F, Xn/Xi    | X              | 0/0  | 0/0  | (2) | 4/4 | 0/0  | (4) | (2) | (3) | 4/4 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | (1) | (1)  | (2)  | 4/4        | 1/0       | 4/4 | 0/0 | 1/1    | 1/1  | 1/1  | 0/0                                              |                                    |         |                                  |
| DDT (emulsion)                | C <sub>14</sub> H <sub>9</sub> Cl <sub>5</sub>                                   | 000050-29-3 |               | T           |                | 0/0  | 0/0  | (2) | (3) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 4/4 | 0/0            | (1) | (1)  | (2)  | (2)        | (3)       | (3) | 0/0 | (2)    | (2)  | (2)  | 0/0                                              |                                    |         |                                  |
| Decahydronaphthalene          | C <sub>10</sub> H <sub>18</sub>                                                  | 000091-17-8 |               | Xn          |                | 1/3  | 3/4  | 1/0 | 4/4 | 3/0  | 4/4 | 1/0 | 3/4 | 4/4 | 4/4 | 1/2      | 3/0       | 3/4 | 1/1            | 1/1 | 1/1  | 1/1  | 4/4        | 1/1       | 4/4 | 0/0 | 1/1    | (1)  | (1)  | 0/0                                              |                                    |         |                                  |
| Decane                        | C <sub>10</sub> H <sub>22</sub>                                                  | 000124-18-5 |               | Xn          | X              | 0/0  | 0/0  | (1) | (2) | (1)  | (3) | 1/1 | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | 1/1 | (1)  | (1)  | 4/4        | 1/0       | 3/3 | 0/0 | 1/1    | (1)  | (1)  |                                                  |                                    |         |                                  |
| Dehydroacetic acid            | C <sub>8</sub> H <sub>8</sub> O <sub>4</sub>                                     | 000520-45-6 |               | Xn          |                | 0/0  | 0/0  | (3) | (2) | 0/0  | 0/0 | (3) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0            | 1/1 | 1/1  | (1)  | (2)        | (2)       | (2) | 0/0 | (4)    | (1)  | (1)  |                                                  |                                    |         |                                  |
| Densodrin W                   | —                                                                                | —           | aqueous       | ?           |                | 0/0  | 0/0  | 0/0 | 0/0 | 0/0  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 1/1      | 0/0       | 0/0 | 0/0            | (1) | 1/1  | 1/0  | 0/0        | 0/0       | 1/0 | 0/0 | 0/0    | 0/0  | 0/0  | appliance for moisture-proofing of leather; BASF |                                    |         |                                  |
| Desiccator fat                | —                                                                                | —           |               | —           |                | 0/0  | 1/3  | 1/0 | (2) | (1)  | 0/0 | (1) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | (1) | 1/1  | (1)  | (3)        | (2)       | (2) | 0/0 | (1)    | (1)  | (1)  |                                                  |                                    |         |                                  |
| Desmodur 44                   | C <sub>15</sub> H <sub>10</sub> N <sub>2</sub> O <sub>2</sub>                    | 000101-68-8 |               | Xn          |                | 0/0  | 0/0  | 0/0 | (3) | 0/0  | 0/0 | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | (1) | (1)  | (2)  | (2)        | 0/0       | 4/4 | 0/0 | (1)    | (1)  | (1)  |                                                  |                                    |         |                                  |
| Developer for fotos           | —                                                                                | —           |               | ?           |                | 1/3  | 1/1  | 4/4 | (2) | 1/0  | 0/0 | 1/3 | 1/2 | 0/0 | 1/0 | 1/3      | 1/0       | 0/0 | 0/0            | (1) | 1/1  | 1/1  | 3/0        | 1/0       | 1/0 | 0/0 | 1/1    | 1/0  | 1/0  |                                                  |                                    |         |                                  |
| Developer liquids             | —                                                                                | —           |               | ?           |                | 1/1  | 1/1  | 4/4 | 1/0 | 1/0  | 0/0 | 1/0 | 1/1 | 0/0 | 1/0 | 1/1      | 1/0       | 0/0 | 0/0            | 1/1 | (1)  | 2/0  | 1/0        | 3/3       | 0/0 | 1/1 | 1/0    | 1/0  | 0/0  |                                                  |                                    |         |                                  |
| Dextrin                       | (C <sub>6</sub> H <sub>10</sub> O <sub>5</sub> ) <sub>n</sub> x H <sub>2</sub> O | 009004-53-9 | aqueous       | —           |                | 1/1  | 1/1  | 1/1 | 1/1 | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1      | 1/1       | 1/1 | 1/1            | 1/1 | 1/1  | 1/1  | 1/1        | 1/1       | 1/1 | 1/1 | 1/1    | 1/1  | 1/1  | 1/1                                              |                                    |         |                                  |
| Diacetone alcohol             | C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>                                    | 000123-42-2 |               | Xi          | X              | 0/0  | 0/0  | (3) | (3) | 0/0  | 0/0 | 1/0 | 2/2 | 0/0 | 0/0 | 0/0      | 0/0       | 4/4 | 0/0            | (1) | (1)  | (2)  | 1/0        | 4/4       | 4/4 | 0/0 | (2)    | (1)  | (1)  |                                                  |                                    |         |                                  |
| Diamine                       | -> see: Hydrazine                                                                |             |               |             |                |      |      |     |     |      |     |     |     |     |     |          |           |     |                |     |      |      |            |           |     |     |        |      |      |                                                  |                                    |         |                                  |
| Diaminoethane                 | C <sub>2</sub> H <sub>8</sub> N <sub>2</sub>                                     | 000107-15-3 | techn. pure   | C, Xn       | X              | 1/1  | 1/3  | 1/0 | (3) | 0/0  | 1/0 | 1/0 | 1/1 | 0/0 | 0/0 | 3/0      | 4/4       | 0/0 | 0/0            | (1) | 1/1  | 1/4  | 1/0        | 4/4       | 3/3 | 0/0 | 1/1    | (1)  | (1)  | 0/0                                              |                                    |         |                                  |
| Diammonium sulfide            | -> see: Ammonium sulfide                                                         |             |               |             |                |      |      |     |     |      |     |     |     |     |     |          |           |     |                |     |      |      |            |           |     |     |        |      |      |                                                  |                                    |         |                                  |
| Diamyl phthalate              | C <sub>18</sub> H <sub>26</sub> O <sub>4</sub>                                   | 000131-18-0 | 100 %         | (T)         |                | 0/0  | 1/3  | (1) | (4) | 0/0  | 0/0 | (2) | (2) | 4/4 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | (1) | (1)  | (2)  | 3/0        | 3/0       | 4/4 | 0/0 | (1)    | (1)  | (1)  | 0/0                                              |                                    |         |                                  |
| Dibenzyl sebacate             | C <sub>24</sub> H <sub>26</sub> O <sub>4</sub>                                   | ??          |               | ?           |                | 0/0  | 0/0  | (2) | (3) | 0/0  | 0/0 | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | (1) | (1)  | (2)  | 2/0        | (4)       | 4/4 | 0/0 | (1)    | (1)  | (1)  | plasticiser                                      |                                    |         |                                  |
| Dibromoethane, 1,2-           | -> see: Ethylene dibromiden (EDB)                                                |             |               |             |                |      |      |     |     |      |     |     |     |     |     |          |           |     |                |     |      |      |            |           |     |     |        |      |      |                                                  |                                    |         |                                  |
| Dibromotetrafluoroethane      | C <sub>2</sub> Br <sub>2</sub> F <sub>4</sub>                                    | 000124-73-2 |               | ?           |                | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | 1/0 | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | 0/0 | (1)  | 0/0  | 4/4        | 3/0       | 3/0 | 0/0 | (3)    | 0/0  | 0/0  |                                                  |                                    |         |                                  |
| Dibutyl phthalate, n-         | C <sub>18</sub> H <sub>22</sub> O <sub>4</sub>                                   | 000084-74-2 | FR, 80°C      | T           |                | 0    | 0    | 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0   | 0        | 0         | 0   | 0              | 0   | (1)  | 0    | 0          | 0         | 4/4 | 0   | 0      | 0    | 0    | 0/0                                              | plasticiser                        |         |                                  |
| Dibutyl phthalate, n-         | C <sub>18</sub> H <sub>22</sub> O <sub>4</sub>                                   | 000084-74-2 |               | T           |                | 1/3  | 3/3  | 1/0 | 4/4 | 1/0  | 0/2 | 1/0 | 2/2 | 4/4 | 1/0 | 4/4      | 4/4       | 0/4 | 1/1            | (1) | 1/1  | 1/3  | 3/0        | 2/3       | 4/4 | 0/0 | (1)    | 1/1  | 1/1  | 0/0                                              | plasticiser                        |         |                                  |
| Dibutyl sebacate              | C <sub>18</sub> H <sub>34</sub> O <sub>4</sub>                                   | 000109-43-3 | techn. pure   | —           |                | 1/0  | 1/3  | 1/0 | (3) | 0/0  | 0/0 | (2) | 1/0 | 4/4 | 0/0 | 4/4      | 4/4       | 4/4 | 0/0            | (1) | 1/1  | 1/0  | 3/0        | 4/4       | 4/4 | 0/0 | (1)    | (1)  | (1)  | plasticiser                                      |                                    |         |                                  |
| Dibutylamine                  | C <sub>8</sub> H <sub>19</sub> N                                                 | 000111-92-2 |               | Xn          | X              | 0/0  | 0/0  | (2) | (3) | 0/0  | (3) | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | (1) | (1)  | (2)  | 4/4        | 4/4       | 4/4 | 0/0 | (1)    | (1)  | (1)  |                                                  |                                    |         |                                  |
| Dichloroacetic acid           | C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub> O <sub>2</sub>                     | 000079-43-6 | 50 %          | C           |                | 1/1  | 1/1  | 4/4 | (4) | 4/4  | 0/0 | 4/4 | 1/1 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | 0/0            | (1) | 1/1  | 1/1  | 4/4        | 4/4       | 4/4 | 0/0 | (4)    | 0/0  | 0/0  | 1/1                                              |                                    |         |                                  |
| Dichloroacetic acid           | C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub> O <sub>2</sub>                     | 000079-43-6 | techn. pure   | C           |                | 1/3  | 3/3  | 4/4 | (4) | 4/4  | 0/0 | 4/4 | 1/3 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | 0/0            | (1) | 1/1  | 1/1  | 4/4        | 4/4       | 4/4 | 0/0 | (4)    | 0/0  | 0/0  | 1/1                                              |                                    |         |                                  |
| Dichlorobenzene, 1,2-         | C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>                                    | 000095-50-1 |               | Xn          |                | 3/3  | 3/4  | (1) | 4/4 | 0/0  | 3/4 | (2) | 3/4 | 4/4 | 4/4 | 4/4      | 4/4       | 1/3 | (1)            | 1/1 | 1/1  | 4/4  | 1/0        | 4/4       | 0/0 | (1) | 0/0    | 0/0  |      |                                                  |                                    |         |                                  |
| Dichlorobenzene, 1,4-         | C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>                                    | 000106-46-7 |               | Xn          |                | 2/3  | 3/4  | 1/0 | 4/4 | 0/0  | 2/3 | (2) | 3/4 | 4/4 | 4/4 | 4/4      | 0/0       | 0/0 | 1/3            | (1) | 1/0  | 1/1  | 4/4        | 1/0       | 4/4 | 0/0 | (1)    | 0/0  | 0/0  |                                                  |                                    |         |                                  |
| Dichlorodifluoromethane       | CCl <sub>2</sub> F <sub>2</sub>                                                  | 000075-71-8 | techn. pure   | N           |                | 4/4  | 3/4  | 1/0 | 4/4 | 0/0  | 0/0 | 1/0 | 4/4 | 4/4 | 1/0 | 2/0      | 4/4       | 3/3 | 0/0            | 3/3 | 1/0  | 3/4  | 3/0        | 3/0       | 3/3 | 0/0 | (3)    | 0/0  | 0/0  | 0/0                                              |                                    |         |                                  |
| Dichlorodifluoromethane       | CCl <sub>2</sub> F <sub>2</sub>                                                  | 000075-71-8 |               | N           |                | 4/4  | 3/4  | 1/0 | 4/4 | 0/0  | 0/0 | 1/0 | 4/4 | 4/4 | 1/0 | 2/0      | 4/4       | 3/3 | 0/0            | 3/3 | 1/0  | 3/4  | 3/0        | 3/0       | 3/3 | 0/0 | (3)    | 0/0  | 0/0  | 0/0                                              |                                    |         |                                  |
| Dichloroethane                | C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>                                    | —           |               | F, T        | X              | 3/3  | 2/4  | 3/0 | 4/4 | 4/4  | 4/4 | 1/0 | 3/4 | 4/4 | 4/4 | 4/4      | 4/4       | 4/4 | 1/1            | 1/1 | 1/1  | 1/1  | 4/4        | 3/0       | 4/4 | 0/0 | 1/3    | 1/1L | 1/1L | ?                                                | isomer not indicated in the source |         |                                  |
| Dichloroethylene              | C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>                                    | —           | techn. pure   | F+, Xn      | X              | 4/4  | 4/4  | 3/0 | (4) | 4/4  | (4) | 4/4 | 3/0 | 4/4 | 0/0 | 4/4      | 4/4       | 0/0 | 0/0            | (1) | 1/0  | 1/1  | 4/4        | 3/4       | 4/4 | 0/0 | (3)    | 1/1L | 1/1L | ?                                                | isomer not indicated in the source |         |                                  |
| Dichlorofluoromethane         | CHCl <sub>2</sub> F                                                              | 000075-43-4 | 100 %         | N           |                | 0/0  | 3/0  | 1/0 | 3/0 | 0/0  | 0/0 | 1/0 | 4/4 | 4/4 | 4/4 | 3/0      | 4/4       | 4/4 | 3/3            | 0/0 | (3)  | 1/0  | (3)        | 4/4       | 4/4 | 4/4 | 0/0    | (3)  | 0/0  | 0/0                                              |                                    |         |                                  |
| Dichlorohexafluorocyclobutane | C <sub>4</sub> Cl <sub>2</sub> F <sub>6</sub>                                    | 000356-18-3 |               | ?           |                | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | 1/0 | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | 0/0 | (1)  | 0/0  | 1/0        | (3)       | 1/0 | 0/0 | (3)    | 0/0  | 0/0  |                                                  |                                    |         |                                  |
| Dichloroisopropyl ether       | C <sub>6</sub> H <sub>12</sub> Cl <sub>2</sub> O                                 | —           |               | (Xn)        |                | (4)  | (4)  | (2) | (3) | 0/0  | (4) | (3) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0            | (1) |      |      |            |           |     |     |        |      |      |                                                  |                                    |         |                                  |



| CHEMICALS                             | FORMULA                                                       | CAS-NR.     | CONCENTRATION | HAZARD NOTE | FLAMMABLE | thermoplastics ----- |      |     |     |      |      |     |     |     |     |          |           |     |              | fluoroplastics --- |      |      |      | elastomers --- |     |     |     | metals ----- |             |                                                   |                                    | Hastelloy C | COMMENT |
|---------------------------------------|---------------------------------------------------------------|-------------|---------------|-------------|-----------|----------------------|------|-----|-----|------|------|-----|-----|-----|-----|----------|-----------|-----|--------------|--------------------|------|------|------|----------------|-----|-----|-----|--------------|-------------|---------------------------------------------------|------------------------------------|-------------|---------|
|                                       |                                                               |             |               |             |           | HDPE                 | LDPE | PA  | PC  | PETG | PMPP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN | ECTFE / ETFE | FEP                | PTFE | PVDF | EPDM | FPM / FKM      | NBR | SI  | AL  | V2A          | V4A         |                                                   |                                    |             |         |
| Diethyl succinate                     | C <sub>8</sub> H <sub>14</sub> O <sub>4</sub>                 | 000123-25-1 |               | —           |           | 0/0                  | 0/0  | (2) | (4) | 0/0  | 0/0  | (3) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (2)  | (2)  | 4/4            | 4/4 | 0/0 | (1) | (1)          | (1)         |                                                   |                                    |             |         |
| Diethylamine                          | C <sub>6</sub> H <sub>11</sub> N                              | 000109-89-7 | techn. pure   | F, C, Xn    | X         | 0/0                  | 0/0  | (2) | (3) | 0/0  | 0/0  | (2) | 1/2 | 0/0 | 0/0 | 3/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/0  | 1/4  | 2/0  | 4/4            | 4/4 | 0/0 | (1) | 1/1          | 1/1         | 0/0                                               |                                    |             |         |
| Diethylbenzene                        | C <sub>10</sub> H <sub>14</sub>                               | 000135-01-3 |               | Xi          |           | 3/4                  | 4/4  | (1) | 3/4 | 0/0  | 4/4  | (2) | 4/4 | 4/4 | 4/4 | 0/0      | 0/0       | 1/2 | 1/1          | (1)                | (2)  | 4/4  | 1/0  | 4/4            | 0/0 | 1/1 | 1/1 | 1/1          |             |                                                   |                                    |             |         |
| Diethylene glycol                     | C <sub>4</sub> H <sub>10</sub> O <sub>3</sub>                 | 000111-46-6 |               | T           |           | 1/1                  | 1/1  | 3/0 | 2/3 | 0/0  | 1/1  | (2) | 1/1 | 2/2 | 2/2 | 3/4      | 0/0       | 1/1 | 1/1          | 1/1                | (2)  | 1/0  | 1/0  | 3/0            | 0/0 | 1/1 | (1) | (1)          | 0/0         |                                                   |                                    |             |         |
| Diethylene glycolether                | —                                                             | —           |               | (Xn)        |           | 1/1                  | 1/1  | 3/0 | 3/4 | 0/0  | 1/1  | (2) | 1/1 | 4/4 | 3/3 | 3/4      | 0/0       | 0/0 | 1/1          | 1/1                | (1)  | (2)  | 3/0  | (3)            | 3/3 | 0/0 | (1) | (1)          | (1)         |                                                   |                                    |             |         |
| Difluoroethane                        | C <sub>2</sub> H <sub>2</sub> F <sub>2</sub>                  | 000075-37-6 |               | (E), F+     |           | 0/0                  | 0/0  | 1/0 | (3) | 0/0  | 0/0  | 1/0 | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 0/0                | (1)  | 0/0  | 1/0  | 4/4            | 1/0 | 0/0 | (3) | 0/0          | 0/0         |                                                   |                                    |             |         |
| Difluoromethane                       | CH <sub>2</sub> F <sub>2</sub>                                | 000075-10-5 |               | ?           |           | 0/0                  | 0/0  | 1/0 | (3) | 0/0  | 0/0  | 1/0 | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 0/0  | 1/0  | 4/4  | 1/0            | 0/0 | (3) | 0/0 | 0/0          |             |                                                   |                                    |             |         |
| Diglycolic acid                       | C <sub>4</sub> H <sub>6</sub> O <sub>5</sub>                  | 000110-99-6 | aqueous       | Xn          |           | 1/1                  | 1/1  | (3) | (2) | 0/0  | 0/0  | (3) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | (1)  | 1/0  | 1/1            | 4/4 | 0/0 | 3/4 | 1/4          | 1/4         | 1/1                                               |                                    |             |         |
| Diglycolic acid                       | C <sub>4</sub> H <sub>6</sub> O <sub>5</sub>                  | 000110-99-6 | 30 %          | Xn, Xi      |           | 1/1                  | 1/1  | (3) | 1/0 | (2)  | 0/0  | (3) | 1/1 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | 1/0  | 1/0  | 1/1            | 4/4 | 0/0 | 3/4 | 1/4          | 1/4         | 1/1                                               |                                    |             |         |
| Diisobutyl ketone                     | C <sub>8</sub> H <sub>16</sub> O                              | 000108-83-8 | techn. pure   | Xi          | X         | 1/4                  | 1/3  | (3) | (3) | (4)  | 1/0  | 1/4 | 0/0 | 0/0 | 0/0 | 4/4      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/3  | 3/0  | 4/4            | 4/4 | 0/0 | (1) | (1)          | (1)         | 0/0                                               |                                    |             |         |
| Diisobutylene (DIB)                   | C <sub>8</sub> H <sub>10</sub>                                | 025167-70-8 |               | F           | X         | 0/0                  | 0/0  | (1) | (3) | (2)  | (4)  | (1) | 1/2 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | (1)                | 0/0  | 4/4  | 1/0  | 3/3            | 0/0 | 1/1 | 1/1 | 1/1          |             |                                                   |                                    |             |         |
| Diisopropyl ether                     | C <sub>6</sub> H <sub>14</sub> O                              | 000108-20-3 | techn. pure   | F           | X         | 3/4                  | 3/4  | 4/4 | (4) | 1/0  | (4)  | (1) | 3/4 | 4/4 | 1/0 | 4/4      | 4/4       | 0/0 | 0/0          | (1)                | 1/1  | 1/3  | 4/4  | 4/4            | 4/4 | 0/0 | 1/1 | (1)          | (1)         | 0/0                                               |                                    |             |         |
| Di-isopropyl ketone                   | C <sub>7</sub> H <sub>14</sub> O                              | 000565-80-0 |               | F           | X         | 0/0                  | 0/0  | (3) | (3) | (4)  | 0/0  | 1/0 | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | (1)                | (2)  | 1/0  | 4/4  | 4/4            | 0/0 | (1) | (1) | (1)          |             |                                                   |                                    |             |         |
| Dimethyl ether                        | C <sub>2</sub> H <sub>6</sub> O                               | 000115-10-6 | gas           | F+          | X         | 0/0                  | 3/0  | 1/0 | (3) | 1/0  | 0/0  | (2) | 4/4 | 0/0 | 0/0 | 3/0      | 4/4       | 0/0 | 0/0          | 1/0                | (3)  | 3/0  | 4/4  | 4/4            | 0/0 | 1/1 | (1) | (1)          | 0/0         |                                                   |                                    |             |         |
| Dimethyl formamide (DMF)              | C <sub>3</sub> H <sub>7</sub> NO                              | 000068-12-2 |               | T, F        | X         | 1/1                  | 1/3  | 1/0 | 4/4 | 1/0  | 1/1  | 1/2 | 1/1 | 4/4 | 4/4 | 3/4      | 0/0       | 4/4 | 2/2          | 1/1                | 1/1  | 4/4  | 2/0  | 4/4            | 4/4 | 0/0 | (1) | 1/1          | 1/1         | 1/1                                               |                                    |             |         |
| Dimethyl ketone                       | -> see: Acetone                                               |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |
| Dimethyl phthalate (DMP)              | C <sub>10</sub> H <sub>10</sub> O <sub>4</sub>                | 000131-11-3 | 100 %         | (Xn)        |           | 4/4                  | 1/3  | (2) | 4/4 | 0/0  | 0/0  | (2) | 2/3 | 4/4 | 0/0 | 4/4      | 4/4       | 4/4 | 0/0          | (1)                | 1/1  | (2)  | 3/0  | 2/0            | 4/4 | 0/0 | (1) | (1)          | (1)         | 0/0                                               | plasticiser                        |             |         |
| Dimethyl sulfoxide (DMSO)             | C <sub>2</sub> H <sub>6</sub> SO                              | 000067-68-5 |               | Xi          |           | 1/1                  | 1/1  | (2) | 4/4 | 0/0  | 1/1  | 1/0 | 1/1 | 1/2 | 4/4 | 4/4      | 0/0       | 0/0 | 1/2          | 1/1                | (1)  | (3)  | (3)  | (3)            | (4) | 0/0 | (1) | (1)          | (1)         |                                                   |                                    |             |         |
| Dimethylacetone                       | -> see: Pentanone, 3-                                         |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |
| Dimethylamine                         | C <sub>2</sub> H <sub>7</sub> N                               | 000124-40-3 | techn. pure   | F+, Xn      | X         | 1/3                  | 1/3  | 1/0 | 4/4 | 0/0  | 0/0  | (2) | 1/3 | 0/0 | 0/0 | 3/4      | 4/4       | 0/0 | 0/0          | (1)                | 1/1  | 3/0  | 3/0  | 4/4            | 4/4 | 0/0 | (1) | (1)          | (1)         | 1/1                                               |                                    |             |         |
| Dimethylaniline                       | C <sub>8</sub> H <sub>9</sub> N                               | —           |               | T           |           | 0/0                  | 0/0  | (3) | 4/4 | 0/0  | 0/0  | (2) | 4/4 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (2)  | 3/0  | 4/4            | 4/4 | 0/0 | (1) | (1)          | (1)         | 0/0                                               | isomer not indicated in the source |             |         |
| Dinitro ethylene glycol               | C <sub>2</sub> H <sub>4</sub> (NO <sub>2</sub> ) <sub>2</sub> | 000628-96-6 | diluted       | (E, T+)     |           | 0/0                  | 0/0  | (3) | (3) | 0/0  | 0/0  | (2) | (2) | 0/0 | 0/0 | 4/4      | 4/4       | 0/0 | 0/0          | (1)                | (1)  | (3)  | 1/0  | 1/0            | 4/4 | 0/0 | 0/0 | (1)          | (1)         | 0/0                                               |                                    |             |         |
| Dinonyl phthalate (DNP)               | C <sub>26</sub> H <sub>42</sub> O <sub>4</sub>                | 000084-76-4 | techn. pure   | Xn          |           | 3/0                  | 0/0  | (2) | 3/0 | 0/0  | 0/0  | (2) | 1/3 | 0/0 | 0/0 | 4/4      | 0/0       | 0/0 | 0/0          | (1)                | 1/0  | (2)  | (3)  | 4/4            | 4/4 | 0/0 | (1) | (1)          | (1)         | plasticiser                                       |                                    |             |         |
| Diocetyl adipate                      | C <sub>22</sub> H <sub>42</sub> O <sub>4</sub>                | 000103-23-1 |               | ?           |           | 0/0                  | 0/0  | (2) | (3) | 0/0  | 0/0  | (2) | 4/4 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | (2)  | (3)  | (3)            | 4/4 | 0/0 | (1) | (1)          | (1)         | plasticiser                                       |                                    |             |         |
| Diocetyl phthalate (DOP)              | C <sub>28</sub> H <sub>38</sub> O <sub>4</sub>                | 000117-81-7 | techn. pure   | Xn          |           | 4/4                  | 4/4  | 1/0 | 4/4 | 1/0  | 1/0  | (2) | 4/4 | 4/4 | 1/0 | 4/4      | 4/4       | 0/0 | 0/0          | 1/1                | 1/0  | (2)  | 3/0  | 2/3            | 4/4 | 0/0 | (1) | (1)          | (1)         | plasticiser                                       |                                    |             |         |
| Diocetyl sebacate                     | C <sub>28</sub> H <sub>50</sub> O <sub>4</sub>                | 002432-87-3 |               | —           |           | 0/0                  | 0/0  | (2) | (3) | 0/0  | 0/0  | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | (1)                | (2)  | 2/0  | 3/0  | 4/4            | 0/0 | (1) | (1) | (1)          | plasticiser |                                                   |                                    |             |         |
| Dioxane                               | C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>                  | 000123-91-1 |               | F, Xn       | X         | 2/2                  | 2/3  | 1/0 | 4/4 | 1/0  | 2/3  | 1/2 | 3/3 | 4/4 | 2/3 | 3/4      | 4/4       | 1/3 | 1/1          | 1/1                | 3/3  | 2/0  | 4/4  | 4/4            | 0/0 | 1/1 | 1/0 | 1/0          | 0/0         |                                                   |                                    |             |         |
| Diphenyl ether                        | C <sub>12</sub> H <sub>10</sub> O                             | 000101-84-8 |               | Xn/Xi       |           | 0/0                  | 1/0  | 3/0 | (3) | (4)  | 0/0  | 1/1 | 4/4 | 4/4 | 0/0 | 0/0      | 4/4       | 4/4 | 0/0          | (1)                | 1/0  | (2)  | 4/4  | 3/0            | 4/4 | 0/0 | (1) | (1)          | (1)         | 0/0                                               |                                    |             |         |
| Diphenylamine                         | C <sub>12</sub> H <sub>11</sub> N                             | 000122-39-4 |               | T           |           | 0/0                  | 0/0  | 0/0 | (3) | 0/0  | 0/0  | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 4/4 | 0/0          | (1)                | (1)  | (2)  | (3)  | (3)            | (4) | 0/0 | (1) | (1)          | (1)         | 0/0                                               |                                    |             |         |
| Diphyll                               | —                                                             | 008004-13-5 |               | ?           |           | 0/0                  | 0/0  | 1/1 | (3) | 4/4  | 0/0  | 1/1 | 4/4 | 4/4 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (2)  | 4/4  | 3/0            | 4/4 | 0/0 | (1) | (1)          | (1)         | mixture with diphenyl and diphenyl ether; Bayer   |                                    |             |         |
| Dipropyl ketone                       | C <sub>7</sub> H <sub>14</sub> O                              | 000123-19-3 |               | —           | X         | 0/0                  | 0/0  | (3) | (4) | (4)  | (4)  | 1/0 | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (2)  | (3)  | (4)            | 4/4 | 0/0 | (1) | (1)          | (1)         |                                                   |                                    |             |         |
| Dipropylene glycol                    | C <sub>8</sub> H <sub>16</sub> O <sub>3</sub>                 | 025265-71-8 |               | Xi          |           | 1/1                  | 1/1  | (2) | 2/3 | 0/0  | 1/1  | 1/0 | 1/1 | 1/1 | 2/2 | 2/3      | 0/0       | 0/0 | 1/1          | 1/1                | (1)  | (2)  | 4/4  | 3/0            | 3/3 | 0/0 | (1) | (1)          | (1)         |                                                   |                                    |             |         |
| Dipropylene glycol (mono)methyl ether | C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>                 | —           |               | —           | X         | 0/0                  | 0/0  | (3) | (3) | 0/0  | 0/0  | (2) | (2) | 0/0 | 0/0 | 0/0      | 4/4       | 0/0 | 0/0          | (1)                | (1)  | (2)  | (3)  | (3)            | 4/4 | 0/0 | (1) | (1)          | (1)         | 0/0                                               | isomer not indicated in the source |             |         |
| Disodium phosphate                    | Na <sub>2</sub> HPO <sub>4</sub>                              | 007558-79-4 |               | (Xi)        |           | 1/1                  | 1/1  | 1/0 | (2) | 1/0  | 0/0  | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 1/1 | 1/1          | 1/1                | 1/1  | 1/0  | 1/0  | (1)            | 0/0 | (1) | 1/1 | 1/1          | 0/0         |                                                   |                                    |             |         |
| Dispersion of rubber                  | —                                                             | —           |               | ?           |           | 0/0                  | 0/0  | 1/0 | (2) | (2)  | 0/0  | 2/3 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (1)  | (3)  | (1)            | (2) | 0/0 | (3) | (1)          | (1)         | latex                                             |                                    |             |         |
| Dithionous acid, disodium salt        | -> see: Sodium hydrosulfite                                   |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |
| Divinylene oxide                      | -> see: Furan                                                 |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |
| Dope, viscous ~                       | —                                                             | —           |               | (Xn, Xi)    |           | 1/1                  | 1/1  | 4/4 | (3) | 0/0  | 0/0  |     | 1/1 | 0/0 | 0/0 | 1/1      | 1/1       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | (3)  | (2)            | 4/4 | 0/0 | (3) | 3/4          | 2/4         | 0/0                                               |                                    |             |         |
| Emulsifiers                           | —                                                             | —           |               | ?           |           | 0/0                  | 0/0  | (2) | 0/0 | 0/0  | 0/0  | 0/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (1)  | (2)  | (2)            | (3) | 0/0 | 0/0 | K            | K           |                                                   |                                    |             |         |
| Emulsions for fotos                   | —                                                             | —           |               | ?           |           | 1/0                  | 0/0  | 1/0 | (2) | (2)  | 0/0  | 1/0 | 1/0 | 0/0 | 0/0 | 1/0      | 0/0       | 0/0 | (1)          | 1/1                | 1/1  | (2)  | (2)  | (1)            | 0/0 | (2) | 0/0 | 0/0          |             |                                                   |                                    |             |         |
| Ephetin                               | —                                                             | —           | 10% in water  | ?           |           | 0/0                  | 0/0  | 0/0 | 0/0 | 0/0  | 0/0  | 0/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 0/0                | 0/0  | 0/0  | 0/0  | 0/0            | 0/0 | 0/0 | 0/0 | 0/0          | 0/0         |                                                   |                                    |             |         |
| Epichlorhydrin                        | C <sub>3</sub> H <sub>5</sub> ClO                             | 000106-89-8 | 100 %         | F, T        | X         | 1/0                  | 1/0  | 4/4 | (4) | 0/0  | (4)  | 1/0 | 2/2 | 0/0 | 0/0 | 4/4      | 4/4       | 0/0 | 0/0          | (1)                | 1/0  | (3)  | 3/0  | 4/4            | 4/4 | 0/0 | (3) | 0/0          | 0/0         | 0/0                                               |                                    |             |         |
| Epoxypropane, 1,2-                    | -> see: Propylene oxid                                        |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |
| Ethanal                               | -> see: Acetaldehyde                                          |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |
| Ethanedioic acid                      | -> see: Oxalic acid                                           |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |
| Ethanenitrile                         | -> see: Acetonitrile                                          |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |
| Ethanoyl chloride                     | -> see: Acetyl chloride                                       |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |
| Ethoxybenzene                         | C <sub>8</sub> H <sub>10</sub> O                              | 000103-73-1 |               | ?           |           | 0/0                  | 0/0  | (2) | (4) | 0/0  | (3)  | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (2)  | 4/4  | 4/4            | 4/4 | 0/0 | (1) | (1)          | (1)         | Ethyl phenyl ether; Phenyl ethyl ether; Phenetole |                                    |             |         |
| Ethyl acetate                         | C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>                  | 000141-78-6 | 100 %         | F           | X         | 1/3                  | 3/4  | 1/0 | 4/4 | 4/4  | 4/4  | 1/1 | 1/3 | 4/4 | 4/4 | 4/4      | 4/4       | 1/2 | 1/1          | 1/1                | 3/3  | 3/0  | 4/4  | 4/4            | 0/0 | 1/1 | (1) | (1)          | 1/0         |                                                   |                                    |             |         |
| Ethyl acrylate                        | C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>                  | 000140-88-5 | 100 %         | F, Xn       | X         | 4/4                  | 4/4  | 1/0 | (4) | (4)  | (4)  | (2) | 4/4 | 0/0 | 0/0 |          |           |     |              |                    |      |      |      |                |     |     |     |              |             |                                                   |                                    |             |         |

| CHEMICALS                                   | FORMULA                                                       | CAS-NR.     | CONCENTRATION | HAZARD NOTE | FLAMMABLE | thermoplastics ----- |      |     |     |      |      |     |     |     |     |          |           |     |              |     |      | --- fluoroplastics --- |      |           |     | --- elastomers --- |      |      |     | ----- metals -----                                                     |     |     |     | Hastelloy C | COMMENT |     |  |  |  |  |  |
|---------------------------------------------|---------------------------------------------------------------|-------------|---------------|-------------|-----------|----------------------|------|-----|-----|------|------|-----|-----|-----|-----|----------|-----------|-----|--------------|-----|------|------------------------|------|-----------|-----|--------------------|------|------|-----|------------------------------------------------------------------------|-----|-----|-----|-------------|---------|-----|--|--|--|--|--|
|                                             |                                                               |             |               |             |           | HDPE                 | LDPE | PA  | PC  | PETG | PMPP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN | ECTFE / ETFE | FEP | PTFE | PVDF                   | EPDM | FPM / FKM | NBR | SI                 | AL   | V2A  | V4A |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl alcohol                               | C <sub>2</sub> H <sub>6</sub> O                               | 000064-17-5 | 50 %          | —           | X         |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |     |      |                        |      |           |     |                    |      |      |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl alcohol                               | C <sub>2</sub> H <sub>6</sub> O                               | 000064-17-5 | 96 %          | F           | X         | 1/0                  | 1/3  | 1/0 | 1/3 | 1/1  | 1/2  | 1/2 | 1/1 | 3/4 | 1/2 | 1/3      | 3/0       | 1/3 | 1/1          | 1/1 | 1/1  | 1/0                    | 3/0  | 3/3       | 0/0 | 1/1                | 1/1  | 1/1  | 1/1 | 1/0                                                                    | (2) | 1/1 | 0/0 | 1/1         | 1/1     | 1/1 |  |  |  |  |  |
| Ethyl aldehyde                              | -> see: Acetaldehyde                                          |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |     |      |                        |      |           |     |                    |      |      |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl benzoate                              | C <sub>9</sub> H <sub>10</sub> O <sub>2</sub>                 | 000093-89-0 |               | Xn          |           | 2/2                  | 3/3  | (2) | 4/4 | 0/0  | 2/3  | (2) | 2/3 | 4/4 | 4/4 | 4/4      | 0/0       | 4/4 | 1/2          | 1/1 | 1/0  | (3)                    | (3)  | (3)       | 4/4 | 0/0                | (1)  | (1)  | (1) |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl butyrate                              | C <sub>8</sub> H <sub>12</sub> O <sub>2</sub>                 | 000105-54-4 |               | F           | X         | 2/3                  | 2/4  | (2) | 4/4 | 0/0  | 3/4  | (2) | 2/4 | 4/4 | 4/4 | 4/4      | 0/0       | 0/0 | 1/2          | 1/1 | (1)  | (2)                    | (3)  | (4)       | 4/4 | 0/0                | (1)  | (1)  | (1) |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl chloride                              | -> see: Monochloroethane                                      |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |     |      |                        |      |           |     |                    |      |      |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl chloroacetate                         | C <sub>4</sub> H <sub>7</sub> ClO <sub>2</sub>                | 000105-39-5 | techn. pure   | T/Xi        |           | 1/1                  | 1/1  | (3) | 4/4 | (4)  | (4)  | (3) | 1/1 | 4/4 | 0/0 | 3/4      | 3/4       | 0/0 | 0/0          | (1) | 1/1  | 1/4                    | 3/0  | 4/4       | 4/4 | 0/0                | 3/4  | 0/0  | 0/0 | 0/0                                                                    | 0/0 | 0/0 | 0/0 | 0/0         | 0/0     |     |  |  |  |  |  |
| Ethyl cyanoacetate                          | C <sub>5</sub> H <sub>7</sub> NO <sub>2</sub>                 | 000105-56-6 |               | Xn/Xi       |           | 1/1                  | 1/1  | 0/0 | 3/4 | 0/0  | 1/1  | (2) | 1/1 | 2/4 | 3/3 | 3/4      | 0/0       | 0/0 | 1/1          | 1/1 | (1)  | (3)                    | (2)  | (3)       | (3) | 0/0                | (2)  | (1)  | (1) | 0/0                                                                    |     |     |     |             | 0/0     |     |  |  |  |  |  |
| Ethyl formate                               | C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>                  | 000109-94-4 |               | F           | X         | 0/0                  | 0/0  | 0/0 | (4) | 0/0  | (4)  | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | (1)  | (3)                    | (3)  | (4)       | 4/4 | 0/0                | (1)  | (1)  | (1) |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl lactate                               | C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>                 | 000097-64-3 |               | —           | X         | 1/1                  | 1/1  | (2) | 3/4 | 0/0  | 1/1  | (2) | 1/1 | 3/4 | 3/3 | 3/4      | 0/0       | 1/1 | 1/1          | (1) | 3/0  | (3)                    | (3)  | (3)       | 0/0 | (1)                | (1)  | (1)  |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl mercaptan                             | C <sub>2</sub> H <sub>6</sub> S                               | 000075-08-1 |               | F, Xn       | X         | 0/0                  | 0/0  | (2) | (3) | 0/0  | 0/0  | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | (1)  | (2)                    | (3)  | (3)       | 4/4 | 0/0                | (1)  | (1)  | (1) |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl phenyl ether                          | -> see: Ethoxybenzene                                         |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |     |      |                        |      |           |     |                    |      |      |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethyl silicate                              | C <sub>8</sub> H <sub>20</sub> SiO <sub>4</sub>               | 000078-10-4 |               | Xn          | X         | 0/0                  | 0/0  | (2) | (3) | 0/0  | 0/0  | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | (1)  | (2)                    | (3)  | (3)       | 1/0 | 0/0                | (1)  | (1)  | (1) |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethylbenzene                                | C <sub>8</sub> H <sub>10</sub>                                | 000100-41-4 |               | F, Xn       | X         | 2/3                  | 3/4  | (2) | 4/4 | 0/0  | 3/4  | 1/0 | 3/4 | 4/4 | 4/4 | 4/4      | 4/4       | 2/3 | 1/1          | 1/0 | 1/1  | 4/4                    | (2)  | 4/4       | 0/0 | (1)                | (1)  | (1)  | 0/0 |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethylene                                    | C <sub>2</sub> H <sub>4</sub>                                 | 000074-85-1 |               | F+          | X         | 0/0                  | 0/0  | 1/0 | (2) | 0/0  | 0/0  | 1/0 | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1 | (1)  | (2)                    | (3)  | 3/0       | 3/3 | 0/0                | (1)  | (1)  | (1) | 0/0                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Ethylene dibromiden (EDB)                   | C <sub>2</sub> H <sub>4</sub> Br <sub>2</sub>                 | 000106-93-4 |               | T           |           | (4)                  | (4)  | (2) | (4) | (4)  | (4)  | (2) | 4/4 | 4/4 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | (1) | 1/2  | 4/4                    | (3)  | 4/4       | 0/0 | (3)                | 1/0L | 1/0L | 0/0 | Dibromoethane, 1,2-;                                                   |     |     |     |             |         |     |  |  |  |  |  |
| Ethylene glycol                             | C <sub>2</sub> H <sub>6</sub> O <sub>2</sub>                  | 000107-21-1 |               | Xn          |           | 1/1                  | 1/1  | 3/3 | 2/3 | 1/0  | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1      | 3/3       | 1/1 | 1/1          | 1/1 | 1/1  | 1/0                    | 1/2  | 1/1       | 0/0 | 1/1                | 1/1  | 1/1  | 1/1 | 1/1                                                                    | 1/1 | 1/1 | 1/1 | 1/1         | 1/1     |     |  |  |  |  |  |
| Ethylene glycol monobutyl ether             | C <sub>4</sub> H <sub>14</sub> O <sub>2</sub>                 | 000111-76-2 | 100 %         | Xn          | X         | 0/0                  | 1/0  | 1/0 | (2) | 1/0  | 0/0  | 1/0 | 1/0 | 0/0 | 0/0 | 4/4      | 4/4       | 0/0 | 0/0          | 1/1 | 1/0  | 1/1                    | 3/0  | 3/4       | 3/4 | 0/0                | 1/1  | (1)  | (1) | 0/0                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Ethylene glycol monoethyl ether             | C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>                 | 000110-80-5 | 100 %         | T           | X         | 0/0                  | 4/4  | (3) | (2) | 0/0  | 0/0  | 1/0 | 2/4 | 4/4 | 1/0 | 4/4      | 4/4       | 4/4 | 0/0          | 1/1 | 1/0  | 1/1                    | 3/0  | 4/4       | 4/4 | 0/0                | (1)  | (1)  | (1) | 0/0                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Ethylene glycol monoethyl ether acetate     | C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>                 | 000115-15-9 |               | Xn          | X         | 1/1                  | 1/2  | 0/0 | 3/4 | 0/0  | 1/2  | (2) | 1/2 | 4/4 | 4/4 | 3/4      | 0/0       | 0/0 | 1/2          | 1/1 | (1)  | (2)                    | 2/0  | 4/4       | 4/4 | 0/0                | (1)  | (1)  | (1) |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Ethylene glycol monomethyl ether            | C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>                  | 000109-86-4 | 100 %         | T           | X         | 1/0                  | 1/1  | 1/0 | 3/4 | 0/0  | 1/1  | 1/0 | 1/1 | 4/4 | 3/3 | 3/4      | 4/4       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1                    | 3/0  | 4/4       | 4/4 | 0/0                | (1)  | (1)  | (1) | 0/0                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Ethylene glycol monomethyl ether oleate     | C <sub>21</sub> H <sub>40</sub> O <sub>3</sub>                | 000111-10-4 |               | ?           |           | 1/1                  | 1/2  | (2) | 3/4 | (2)  | 1/2  | (2) | 1/2 | 4/4 | 4/4 | 4/4      | 0/0       | 0/0 | 1/1          | 1/1 | (1)  | (1)                    | 4/4  | (2)       | 4/4 | 0/0                | (1)  | (1)  | (1) | Kapsolat; Methoxyethyl oleate; Methyl cellosolveat oleate; plasticiser |     |     |     |             |         |     |  |  |  |  |  |
| Ethylene oxide                              | C <sub>2</sub> H <sub>4</sub> O                               | 000075-21-8 |               | F+, T       | X         | 2/3                  | 3/3  | 3/0 | 3/4 | 1/0  | 3/4  | 1/0 | 3/3 | 4/4 | 1/1 | 3/4      | 0/0       | 0/0 | 1/1          | 1/1 | (1)  | 1/1                    | 4/4  | 4/4       | 4/4 | 0/0                | 1/1  | (1)  | (1) | 0/0                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Ethylenediaminetetraacetic acid (EDTA)      | C <sub>10</sub> H <sub>16</sub> N <sub>2</sub> O <sub>8</sub> | 000060-00-4 |               | Xi          |           | 1/1                  | 1/1  | (2) | (2) | (2)  | 0/0  | 1/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | (1)                    | (1)  | (2)       | (1) | 0/0                | (3)  | 0/0  | 0/0 | 0/0                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Ethylhexanol-1                              | C <sub>8</sub> H <sub>18</sub> O                              | 000104-76-7 |               | Xn/Xi       |           | 0/0                  | 1/3  | (2) | (2) | (1)  | 1/0  | 1/0 | 1/0 | 3/0 | 0/0 | 1/0      | 4/4       | 0/0 | 0/0          | (1) | 1/1  | (1)                    | 1/0  | 1/0       | 1/0 | 0/0                | (1)  | (1)  | (1) | 1/1                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Ethyne                                      | -> see: Acetylene                                             |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |     |      |                        |      |           |     |                    |      |      |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Eucalyptus oil                              | —                                                             | 008000-48-8 |               | ?           |           | 0/0                  | 0/0  | (2) | (3) | 0/0  | 0/0  | (2) | (2) | 4/4 | 0/0 | 0/0      | 0/0       | 3/3 | 0/0          | (1) | (1)  | (2)                    | 4/4  | (3)       | (4) | 0/0                | (1)  | (1)  | (1) |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Exhaust gases, alkaline                     | —                                                             | —           |               | ?           |           | 1/1                  | 0/0  | (2) | 0/0 | 0/0  | 0/0  | (1) | 1/1 | 0/0 | 0/0 | 1/1      | 0/0       | 0/0 | 0/0          | 1/1 | 1/4  | 1/0                    | 1/0  | 1/0       | 0/0 | (2)                | (1)  | (1)  |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Exhaust gases, containing carbon dioxide    | —                                                             | —           | small         | ?           |           | 1/1                  | 0/0  | (1) | (1) | (1)  | (1)  | (1) | 1/1 | (1) | (1) | 1/1      | (1)       | (1) | 1/1          | 1/1 | 1/1  | 1/1                    | 1/0  | 1/0       | (1) | (1)                | (1)  | (1)  | 0/0 |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Exhaust gases, containing hydrochloric acid | —                                                             | —           | each          | ?           |           | 1/1                  | 0/1  | 3/3 | 0/0 | 0/0  | (4)  | 1/1 | 0/0 | 0/0 | 1/1 | 0/0      | 0/0       | 1/1 | 1/1          | 1/1 | 1/1  | 1/0                    | 1/0  | 3/0       | 0/0 | (4)                | 2/2L | 2/2L | 3/3 |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Exhaust gases, containing hydrogen fluoride | —                                                             | —           | small         | ?           |           | 1/1                  | 0/0  | (3) | (3) | 0/0  | 0/0  | (4) | 1/1 | 0/0 | 0/0 | 1/1      | 0/0       | (2) | 1/1          | 1/1 | 1/1  | 1/0                    | 1/0  | 1/0       | 0/0 | (4)                | (2)  | (2)  | 1/1 |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Exhaust gases, containing nitrose           | —                                                             | —           | small         | ?           |           | 1/1                  | 0/0  | (3) | 0/0 | 0/0  | 0/0  | (4) | 1/3 | 0/0 | 0/0 | 1/1      | 0/0       | (2) | 1/1          | 1/1 | 1/1  | 1/0                    | 1/0  | (3)       | 0/0 | (2)                | (1)  | (1)  |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Exhaust gases, containing sulfur dioxide    | —                                                             | —           | small         | ?           |           | 1/1                  | 0/0  | (2) | 0/0 | 0/0  | (4)  | 1/1 | 0/0 | 0/0 | 1/1 | 0/0      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | 1/0                    | 1/0  | 3/0       | 0/0 | (4)                | 1/1  | 1/1  | 0/0 |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Exhaust gases, containing sulfur trioxide   | —                                                             | —           | small         | ?           |           | 1/1                  | 0/0  | (4) | 0/0 | 0/0  | 0/0  | (4) | 4/4 | 0/0 | 0/0 | 1/1      | 0/0       | (2) | (2)          | 1/1 | 1/1  | 1/0                    | 1/0  | 4/4       | 0/0 | (4)                | (2)  | (1)  | 0/0 |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Exhaust gases, containing sulfuric acid     | —                                                             | —           | each          | ?           |           | 1/1                  | 0/0  | (4) | 0/0 | 0/0  | 0/0  | (4) | 1/3 | 0/0 | 0/0 | 1/1      | 0/0       | (2) | 1/1          | 1/1 | 1/1  | 1/0                    | 1/0  | 4/4       | 0/0 | (4)                | (2)  | (1)  | 0/0 |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Fat, animal                                 | —                                                             | —           | —             | —           |           | 0/0                  | 0/0  | 1/0 | (2) | 1/0  | 0/0  | 1/1 | 1/3 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | 1/1 | 1/1  | 4/4                    | 1/0  | 1/0       | 0/0 | (1)                | 1/1  | 1/1  |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Fat, mineral                                | —                                                             | —           | —             | (—)         |           | 0/0                  | 0/0  | 1/0 | (2) | (1)  | 0/0  | 1/1 | 1/3 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | 1/1 | 1/1  | (4)                    | (1)  | 1/0       | 0/0 | (1)                | 1/1  | 1/1  |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Fat, vegetable                              | —                                                             | —           | —             | —           |           | 0/0                  | 0/0  | 1/0 | (2) | 1/0  | 0/0  | 1/1 | 1/3 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | 1/1 | 1/1  | 4/4                    | 1/0  | 1/0       | 0/0 | (1)                | 1/1  | 1/1  |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |
| Fats, edible oil                            | —                                                             | —           | —             | —           |           | 0/0                  | 1/0  | 1/0 | 1/0 | 1/0  | 1/0  | 1/1 | 3/0 | 0/0 | 1/0 | 3/0      | 0/0       | 0/0 | (1)          | 1/1 | 1/1  | 4/4                    | 1/0  | 1/1       | 0/0 | (1)                | 1/1  | 1/1  | 1/1 | 1/1                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Fatty alcohol sulfonates                    | —                                                             | —           | aqueous       | (Xn, Xi)    |           | 1/1                  | 0/0  | 1/0 | (2) | 1/0  | 0/0  | 1/1 | 1/3 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | (1)          | 1/1 | 1/1  | (2)                    | 1/1  | 0/0       | 3/4 | 1/0                | 1/0  | 0/0  | 0/0 | detergents                                                             |     |     |     |             |         |     |  |  |  |  |  |
| Ferric chloride                             | FeCl <sub>3</sub>                                             | 007705-08-0 | saturated     | Xn          |           | 1/1                  | 1/1  | 3/0 | 1/0 | 0/0  | 1/0  | 4/4 | 1/1 | 1/1 | 1/0 | 1/1      | 1/0       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/1  | (1)       | 1/1 | 1/0                | 4/4  | 4/4  | 4/4 | 1/1                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Ferric nitrate                              | Fe(NO <sub>3</sub> ) <sub>3</sub>                             | 010421-48-4 | aqueous       | (O, Xn)     |           | 1/1                  | 1/1  | (2) | (2) | 0/0  | 0/0  | (3) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1                    | (1)  | (1)       | 1/0 | 0/0                | 4/4  | 1/1  | 1/1 | 1/1                                                                    |     |     |     |             |         |     |  |  |  |  |  |
| Ferric nitrate                              | Fe(NO <sub>3</sub> ) <sub>3</sub>                             | 010421-48-4 | saturated     | O, Xn       |           | 1/1                  | 1/1  |     |     |      |      |     |     |     |     |          |           |     |              |     |      |                        |      |           |     |                    |      |      |     |                                                                        |     |     |     |             |         |     |  |  |  |  |  |

| CHEMICALS             | FORMULA                               | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics ----- |      |      |     |     |      |     |     |     |     |     |          |           |     | fluoroplastics --- |     |      |      | elastomers --- |           |     |     | metals ----- |     |     |     | Hastelloy C                                                          | COMMENT |
|-----------------------|---------------------------------------|-------------|---------------|-------------|----------------------|------|------|-----|-----|------|-----|-----|-----|-----|-----|----------|-----------|-----|--------------------|-----|------|------|----------------|-----------|-----|-----|--------------|-----|-----|-----|----------------------------------------------------------------------|---------|
|                       |                                       |             |               |             | FLAMMABLE            | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN | ECTFE / ETFE       | FEP | PTFE | PVDF | EPDM           | FPM / FKM | NBR | SI  | AL           | V2A | V4A |     |                                                                      |         |
| Fluorides             | —                                     | —           |               | T           |                      | 1/1  | 1/1  | (2) | 1/1 | (2)  | 1/1 | (1) | 1/1 | 2/2 | 1/1 | 1/1      | 0/0       | 0/0 | 1/1                | 1/1 | (1)  | (1)  | (2)            | (2)       | (1) | 0/0 | 0/0          | K   | K   |     |                                                                      |         |
| Fluorine              | F <sub>2</sub>                        | 007782-41-4 |               | O, T+, C+   |                      | 4/4  | 4/4  | 4/4 | 4/4 | 4/4  | 3/4 | 4/4 | 4/4 | 4/4 | 4/4 | 1/2      | 0/0       | 4/4 | 1/1                | 1/1 | 1/1  | 4/4  | 4/4            | 3/0       | 4/4 | 0/0 | 4/4          | (4) | (4) | 0/0 |                                                                      |         |
| Fluorobenzene         | C <sub>6</sub> H <sub>5</sub> F       | 000462-06-6 |               | F, (Xn)     | X                    | 0/0  | 0/0  | (2) | (4) | 0/0  | (4) | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0                | 0/0 | (1)  | (2)  | 4/4            | 3/0       | 4/4 | 0/0 | (1)          | 0/0 | 0/0 |     |                                                                      |         |
| Fluorocarbons         | —                                     | —           |               | ?           |                      | 0/0  | 0/4  | (2) | (3) | (2)  | 0/0 | (2) | (3) | 4/4 | 0/0 | 0/0      | 0/0       | 0/4 | 1/1                | 0/0 | 1/1  | (3)  | (3)            | (3)       | (3) | 0/0 | (1)          | 0/0 | 0/0 |     | resistance depends on type                                           |         |
| Formaldehyde solution | CH <sub>2</sub> O                     | 000050-00-0 | 10 %          | Xn          |                      | 1/1  | 1/1  | 3/3 | 1/2 | 1/0  | 1/2 | 1/2 | 1/1 | 3/4 | 2/3 | 2/3      | 3/3       | 1/3 | 1/1                | 1/1 | 1/1  | 1/1  | 1/0            | 3/0       | (2) | 0/0 | 1/1          | 1/1 | 1/1 | 1/1 |                                                                      |         |
| Formaldehyde solution | CH <sub>2</sub> O                     | 000050-00-0 | 30 %          | T           |                      | 1/1  | 1/1  | 3/3 | 1/2 | 1/0  | 0/0 | 1/2 | 1/1 | 4/4 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0                | 1/1 | 1/1  | 1/1  | 1/0            | 3/0       | 1/0 | 0/0 | 1/1          | 1/1 | 1/1 | 1/1 |                                                                      |         |
| Formaldehyde solution | CH <sub>2</sub> O                     | 000050-00-0 | 40 %          | T           |                      | 1/2  | 2/3  | 1/3 | 1/2 | 1/0  | 1/2 | 1/2 | 1/2 | 4/4 | 2/3 | 2/3      | 3/3       | 0/4 | 1/1                | 1/1 | 1/1  | 1/1  | 1/0            | 3/0       | (3) | 0/0 | 1/1          | 1/1 | 1/1 | 1/1 |                                                                      |         |
| Formamide             | CH <sub>3</sub> NO                    | 000075-12-7 | techn. pure   | T/Xi        |                      | 1/1  | 1/1  | 1/0 | (3) | 0/0  | 0/0 | 1/0 | 1/1 | 1/0 | 0/0 | 4/4      | 4/4       | 0/0 | 0/0                | 1/0 | 1/1  | (3)  | 3/0            | 273       | 4/4 | 0/0 | 1/1          | 1/1 | 1/1 | 1/1 |                                                                      |         |
| Formic acid           | CH <sub>2</sub> O <sub>2</sub>        | 000064-18-6 |               | 1 C, F      | X                    | 1/1  | 1/2  | 4/4 | 3/3 | 0/0  | 1/2 | 4/4 | 1/2 | 3/3 | 2/2 | 2/3      | 0/0       | 1/3 | 1/1                | 1/1 | 1/1  | 1/1  | 3/4            | 4/4       | 4/4 | 0/0 | (3)          | 1/3 | 1/2 | 1/1 | Hydrogen carboxylic acid; Methanoic acid; Aminic acid; Formylic acid |         |
| Formic acid           | CH <sub>2</sub> O <sub>2</sub>        | 000064-18-6 | 98-100 %      | C, F+, T    | X                    | 1/1  | 1/2  | 4/4 | 3/4 | 0/0  | 1/3 | 4/4 | 1/3 | 3/4 | 3/3 | 3/4      | 1/3       | 3/4 | 1/1                | (1) | 1/1  | 1/1  | 3/4            | 4/4       | 4/4 | 0/0 | 1/0          | 1/3 | 1/2 | 1/0 |                                                                      |         |
| Formic acid           | CH <sub>2</sub> O <sub>2</sub>        | 000064-18-6 | 3 %           | Xi          |                      | 1/1  | 1/2  | 3/4 | 1/2 | 1/0  | 1/2 | 2/4 | 1/2 | 1/2 | 2/2 | 2/3      | 0/0       | 0/0 | 1/1                | 1/1 | 1/1  | 1/1  | 3/0            | (3)       | 4/4 | 0/0 | (3)          | 1/2 | 1/1 | 1/1 |                                                                      |         |
| Freon 11              | -> see: Trichlorofluoromethane        |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 11              | -> see: Trichlorofluoromethane        |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 112             | -> see: Tetrachlorodifluoroethane     |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 112             | -> see: Tetrachlorodifluoroethane     |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 113             | -> see: Trichlorotrifluoroethane      |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 113             | -> see: Trichlorotrifluoroethane      |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 114             | -> see: Dichlorotetrafluoroethane     |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 114             | -> see: Dichlorotetrafluoroethane     |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 114 B2          | -> see: Dibromotetrafluoroethane      |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 114 B2          | -> see: Dibromotetrafluoroethane      |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 115             | -> see: Chloropentafluoroethane       |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 115             | -> see: Chloropentafluoroethane       |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 12              | -> see: Dichlorodifluoromethane       |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 12              | -> see: Dichlorodifluoromethane       |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 13              | -> see: Chlorotrifluoromethane        |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 13              | -> see: Chlorotrifluoromethane        |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 13 B1           | -> see: Bromotrifluoromethane         |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 13 B1           | -> see: Bromotrifluoromethane         |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 14              | -> see: Carbon tetrafluoride          |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 14              | -> see: Carbon tetrafluoride          |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 142b            | -> see: Chlorodifluoroethane          |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 142b            | -> see: Chlorodifluoroethane          |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 152a            | -> see: Difluoroethane                |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 152a            | -> see: Difluoroethane                |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 21              | -> see: Dichlorofluoromethane         |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 21              | -> see: Dichlorofluoromethane         |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 218             | -> see: Octafluoropropane             |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 218             | -> see: Octafluoropropane             |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 22              | -> see: Chlorodifluoromethane         |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 22              | -> see: Chlorodifluoromethane         |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 31              | -> see: Chlorofluoromethane           |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 31              | -> see: Chlorofluoromethane           |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 32              | -> see: Difluoromethane               |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon 32              | -> see: Difluoromethane               |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon C 318           | -> see: Perfluorocyclobutane          |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon C 318           | -> see: Perfluorocyclobutane          |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon C316            | -> see: Dichlorohexafluorocyclobutane |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Freon C316            | -> see: Dichlorohexafluorocyclobutane |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Frigen 12             | -> see: Dichlorodifluoromethane       |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |
| Frigen 12             | -> see: Dichlorodifluoromethane       |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |     |                    |     |      |      |                |           |     |     |              |     |     |     |                                                                      |         |

| CHEMICALS                           | FORMULA                                                          | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics ----- |      |      |      |     |      |      |     |     |     | fluoroplastics --- |          |           | elastomers --- |              |     | metals ----- |      |       |           | Hastelloy C | COMMENT |     |     |     |                                              |                                                              |
|-------------------------------------|------------------------------------------------------------------|-------------|---------------|-------------|----------------------|------|------|------|-----|------|------|-----|-----|-----|--------------------|----------|-----------|----------------|--------------|-----|--------------|------|-------|-----------|-------------|---------|-----|-----|-----|----------------------------------------------|--------------------------------------------------------------|
|                                     |                                                                  |             |               |             | FLAMMABLE            | HDPE | LDPE | PA   | PC  | PETG | PMMP | POM | PP  | PS  | PSU                | PVC HART | PVC WEICH | SAN            | ECTFE / ETFE | FEP | PTFE         | PVDF | EPDM  | FPM / FKM | NBR         | SI      | AL  | V2A | V4A |                                              |                                                              |
| Frigen 21                           | -> see: Dichlorodifluoromethane                                  |             |               |             |                      |      |      |      |     |      |      |     |     |     |                    |          |           |                |              |     |              |      |       |           |             |         |     |     |     |                                              |                                                              |
| Frigen 21                           | -> see: Dichlorodifluoromethane                                  |             |               |             |                      |      |      |      |     |      |      |     |     |     |                    |          |           |                |              |     |              |      |       |           |             |         |     |     |     |                                              |                                                              |
| Frigen 22                           | -> see: Chlorodifluoromethane                                    |             |               |             |                      |      |      |      |     |      |      |     |     |     |                    |          |           |                |              |     |              |      |       |           |             |         |     |     |     |                                              |                                                              |
| Frigen 22                           | -> see: Chlorodifluoromethane                                    |             |               |             |                      |      |      |      |     |      |      |     |     |     |                    |          |           |                |              |     |              |      |       |           |             |         |     |     |     |                                              |                                                              |
| Fructose                            | C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>                    | 000057-48-7 | each          | —           |                      | 1/1  | 1/1  | 1/1  | 1/1 | 1/1  | 0/0  | 1/1 | 1/1 | 1/1 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0   | 1/1       | 1/1         | 0/0     | 1/1 | 1/1 | 1/1 | 1/1                                          | 1/1                                                          |
| Fruit pulp                          | —                                                                | —           | —             | —           |                      | 1/1  | 1/1  | (2)  | 1/1 | 1/1  | 0/0  | 1/1 | 1/1 | 0/0 | 0/0                | 1/0      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0   | 1/0       | 1/1         | 0/0     | (2) | 1/1 | 1/1 | 1/1                                          | 1/1                                                          |
| Fruit wine                          | —                                                                | —           | —             | —           |                      | 1/1  | 1/1  | (2)  | (1) | 1/1  | 0/0  | 1/1 | 1/0 | 0/0 | 0/0                | 1/0      | 0/0       | 0/0            | 1/1          | 1/1 | (1)          | 1/1  | 1/0   | (1)       | 1/0         | 0/0     | (2) | 1/1 | 1/1 | 1/1                                          | 1/1                                                          |
| Fuel + 20% ethyl alcohol            | —                                                                | —           | —             | F, T        | X                    | 0/0  | 0/0  | (1)  | 4/4 | 0/0  | (4)  | 2/2 | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 4/4   | 3/0       | 3/0         | 0/0     | (1) | 1/1 | 1/1 |                                              |                                                              |
| Fuel + 20% methyl alcohol           | —                                                                | —           | —             | F, T        | X                    | 0/0  | 0/0  | (1)  | 4/4 | 0/0  | (4)  | 2/2 | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 4/4   | (3)       | 4/4         | 0/0     | (1) | 1/1 | 1/1 |                                              |                                                              |
| Fuel, Normal                        | —                                                                | —           | —             | F, T        | X                    | 0/0  | 0/0  | 1/0  | 3/0 | 1/1  | (4)  | 2/2 | 3/4 | 4/4 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 4/4   | 1/0       | 3/0         | 0/0     | 1/1 | 1/1 | 1/1 |                                              |                                                              |
| Fuel, piston engine (JP)            | —                                                                | —           | —             | (Xn)        |                      | 0/0  | 0/0  | (1)  | (3) | 0/0  | 0/0  | 1/0 | 1/4 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (2)          | 4/4  | 1/0   | 1/0       | 0/0         | (1)     | (1) | (1) |     |                                              |                                                              |
| Fuel, Super                         | —                                                                | —           | —             | F, T        | X                    | 0/0  | 0/0  | 1/0  | 4/4 | (2)  | (4)  | 2/2 | 3/4 | 4/4 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 4/4   | 1/0       | 3/0         | 0/0     | 1/1 | 1/1 | 1/1 |                                              |                                                              |
| Furalmethanal, 2-                   | -> see: Furfural                                                 |             |               |             |                      |      |      |      |     |      |      |     |     |     |                    |          |           |                |              |     |              |      |       |           |             |         |     |     |     |                                              |                                                              |
| Furan                               | C <sub>4</sub> H <sub>4</sub> O                                  | 000110-00-9 |               | F+, T+      | X                    | 0/0  | 0/0  | (3)  | 4/4 | 0/0  | (4)  | (2) | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (3)  | 4/4   | 4/4       | 4/4         | 0/0     | (1) | (1) | (1) | 0/0                                          | Furfuran; Divinylene oxide; Oxacyclopentadiene               |
| Furancarboxyaldehyde, 2-            | -> see: Furfural                                                 |             |               |             |                      |      |      |      |     |      |      |     |     |     |                    |          |           |                |              |     |              |      |       |           |             |         |     |     |     |                                              |                                                              |
| Furfural                            | C <sub>5</sub> H <sub>4</sub> O <sub>2</sub>                     | 000098-01-1 |               | T           |                      | 1/3  | 3/4  | 3/3  | (3) | 1/0  | 0/0  | 2/0 | 4/4 | 0/0 | 0/0                | 0/0      | 0/0       | 4/4            | 0/0          | (1) | (1)          | 1/2  | 3/0   | 4/4       | 4/4         | 0/0     | 1/1 | 1/1 | 1/1 | 0/0                                          | Furancarboxyaldehyde, 2-; Furaldehyde, 2-; Furalmethanal, 2- |
| Furfuryl alcohol                    | C <sub>5</sub> H <sub>6</sub> O <sub>2</sub>                     | 000098-00-0 | techn. pure   | Xn          |                      | 1/1  | 1/3  | 1/0  | (3) | 1/0  | 0/0  | 1/0 | 1/3 | 0/0 | 4/4                | 4/4      | 4/4       | 3/4            | 0/0          | (1) | 1/1          | 1/3  | 3/0   | (3)       | 4/4         | 0/0     | (1) | (1) | (1) | 0/0                                          |                                                              |
| Gallic acid                         | C <sub>7</sub> H <sub>6</sub> O <sub>5</sub> x H <sub>2</sub> O  | 000149-91-7 |               | Xi          |                      | 1/1  | 1/1  | 1/0  | (3) | 0/0  | 0/0  | (3) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | 1/4  | 3/0   | 1/0       | 3/0         | 0/0     | 1/0 | 1/1 | 1/1 | 1/1                                          |                                                              |
| Gas liquor                          | —                                                                | —           | —             | ?           |                      | 0/0  | 0/0  | (2)  | (2) | 0/0  | 0/0  | (2) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (1)  | (3)   | (2)       | (2)         | 0/0     | (2) | 0/0 | 0/0 |                                              |                                                              |
| Gas oil                             | —                                                                | —           | —             | (Xn)        |                      | 0/0  | 0/0  | (1)  | (2) | 1/0  | 0/0  | (2) | 1/3 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | (1)          | 1/1 | 1/1          | 4/4  | 1/0   | 1/0       | 0/0         | 1/1     | (1) | (1) |     |                                              |                                                              |
| Gas, natural                        | —                                                                | —           | —             | F+          | X                    | 0/0  | 0/0  | 01/0 | 1/0 | 1/0  | 0/0  | 1/0 | (2) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (1)  | 4/4   | 1/0       | 1/0         | 0/0     | 1/1 | (1) | (1) |                                              | mainly methane                                               |
| Gasoline                            | —                                                                | 008006-61-9 | —             | (F, Xn)     | X                    | 0/0  | 0/0  | (1)  | 3/4 | (2)  | 0/0  | 1/2 | 3/4 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 4/4   | 1/0       | 3/0         | 0/0     | 1/1 | (1) | (1) |                                              |                                                              |
| Gasoline                            | C <sub>8</sub> H <sub>12</sub> - C <sub>12</sub> H <sub>26</sub> | 086290-81-5 | —             | F, Xn, N    | X                    | 2/3  | 3/4  | 1/0  | 3/3 | (2)  | 2/3  | 1/2 | 3/4 | 4/4 | 3/3                | 2/4      | 0/0       | 0/4            | 1/1          | 1/1 | 1/1          | 4/4  | (1-3) | 3/0       | 0/0         | 1/1     | 1/1 | 1/1 | 1/1 | 1/1                                          | fuel, lead-free                                              |
| Gearbox oil, EP (Hypoid), 110°C     | —                                                                | —           | —             | ?           |                      | 0    | 0    | 1    | 1   | 1    | 0    | 4   | (3) | 0   | 0                  | 0        | 0         | 0              | 0            | 0   | (2)          | 0    | 4/4   | 0         | 4/4         | 0       | (1) | 1   | 1   | 0/0                                          |                                                              |
| Gelatin                             | —                                                                | 009000-70-8 | each          | —           |                      | 1/1  | 1/1  | 1/1  | 1/1 | 1/1  | 1/1  | 1/1 | 1/1 | 1/1 | 1/1                | 1/0      | 1/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1   | 1/1       | 1/1         | 0/0     | 1/1 | 1/1 | 1/1 | 0/0                                          |                                                              |
| Genantin                            | —                                                                | —           | —             | Xn          |                      | 0/0  | 0/0  | 3/3  | (2) | 1/0  | 0/0  | 1/1 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/0  | 1/2   | 1/1       | 0/0         | 1/1     | 1/1 | 1/1 |     | antifreeze agent , based on glycol; Clariant |                                                              |
| Ginger                              | —                                                                | —           | ground        | ?           |                      | 0/0  | 0/0  | (2)  | (2) | 0/0  | (1)  | (2) | 4/4 | 0/0 | 0/0                | 0/0      | 3/3       | 0/0            | (1)          | (1) | (1)          | (2)  | (1)   | (2)       | 0/0         | (1)     | (1) | (1) |     |                                              |                                                              |
| Glucose                             | C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>                    | 000050-99-7 | each          | —           |                      | 1/1  | 1/1  | 1/1  | 1/1 | 1/1  | 1/1  | 1/1 | 1/1 | 1/1 | 1/1                | 1/1      | 1/1       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1   | 1/1       | 1/1         | 1/1     | 1/1 | 1/1 | 1/1 | 1/1                                          |                                                              |
| Glue (bone glue)                    | —                                                                | —           | each          | —           |                      | 1/0  | 1/1  | (1)  | (1) | 1/1  | 0/0  | (2) | 1/1 | 0/0 | 0/0                | 1/3      | 0/0       | 0/0            | (1)          | 1/1 | (1)          | (1)  | 1/0   | 1/0       | 0/0         | (3)     | 1/1 | 1/1 | 0/0 |                                              |                                                              |
| Glycerol                            | C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>                     | 000056-81-5 | each          | Xi          |                      | 1/1  | 1/1  | 1/0  | 3/3 | 1/0  | 1/1  | 1/0 | 1/1 | 1/1 | 1/1                | 1/1      | 2/3       | 1/1            | 1/1          | 1/1 | 1/1          | 1/0  | 1/1   | 1/0       | 0/0         | 1/1     | 1/1 | 1/1 | 1/1 | 1/1                                          | Glycerin; Propanetriol, 1,2,3-; Trihydroxypropane, 1,2,3-    |
| Glycine                             | C <sub>2</sub> H <sub>5</sub> NO <sub>2</sub>                    | 000056-40-6 | 10 %          | —           |                      | 1/1  | 1/1  | 1/1  | 1/1 | (1)  | 0/0  | 1/1 | 1/1 | 0/0 | 0/0                | 1/3      | 1/3       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1   | 1/0       | 3/3         | 0/0     | (2) | (2) | (2) | 0/0                                          | Glycocol; Aminoacetic acid                                   |
| Glycolic acid                       | C <sub>2</sub> H <sub>4</sub> O <sub>3</sub>                     | 000079-14-1 | 37 %          | Xn          |                      | 1/1  | 0/0  | 4/4  | (2) | 0/0  | 0/0  | (3) | 1/1 | 0/0 | 0/0                | 1/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/3  | 1/0   | 2/0       | 1/0         | 0/0     | 1/0 | 1/3 | 1/3 | 1/1                                          |                                                              |
| Glycolic acid                       | C <sub>2</sub> H <sub>4</sub> O <sub>3</sub>                     | 000079-14-1 | 70 %          | C, Xn       |                      | 1/1  | 1/1  | 4/4  | (2) | 0/0  | 0/0  | (3) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | (2)  | 1/0   | 3/0       | (2)         | 0/0     | (2) | 1/3 | 1/3 | 1/1                                          |                                                              |
| Glysantin                           | —                                                                | —           | —             | Xn          |                      | 1/1  | 1/1  | 3/3  | (2) | 1/0  | 0/0  | 1/1 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | (1)          | 1/1 | 1/1          | 1/0  | 1/2   | 1/1       | 0/0         | 1/1     | 1/1 | 1/1 |     | antifreeze agent , based on glycol; BASF     |                                                              |
| Gum tragacanth                      | —                                                                | 009000-65-1 | —             | —           |                      | 1/1  | 1/1  | 1/1  | 1/1 | 1/1  | 1/1  | 1/1 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1   | 1/1       | 1/1         | 0/0     | (1) | 1/1 | 1/1 |                                              |                                                              |
| HD-Oil motor oil, without aromatics | —                                                                | —           | —             | ?           |                      | 1/0  | 1/3  | 1/0  | 1/1 | 1/1  | 0/0  | 1/1 | 1/3 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | (2)  | 4/4   | (1)       | 3/3         | 0/0     | 1/1 | 1/1 | 1/1 |                                              |                                                              |
| Helium                              | He                                                               | 007440-59-7 | —             | —           |                      | 0/0  | 0/0  | 1/0  | (1) | 1/1  | 0/0  | 1/1 | 1/0 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | (1) | 1/1          | (1)  | 1/0   | 1/0       | 1/0         | 0/0     | 1/1 | 1/1 | 1/1 |                                              |                                                              |
| Henkel-P3-solution                  | —                                                                | —           | —             | ?           |                      | 1/1  | 1/1  | (2)  | (2) | (1)  | 0/0  | (1) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | (1)  | (2)   | (2)       | 1/0         | 0/0     | 0/0 | 1/1 | 1/1 |                                              | cleaner                                                      |
| Heptane, normal                     | C <sub>7</sub> H <sub>16</sub>                                   | 000142-82-5 | —             | F, Xn       | X                    | 2/3  | 3/4  | 1/0  | 1/2 | 1/0  | 3/3  | 1/2 | 2/4 | 4/4 | 1/2                | 2/3      | 4/4       | 1/0            | 1/1          | 1/1 | 1/1          | 1/1  | 4/4   | 1/1       | 1/1         | 0/0     | 1/1 | 1/1 | 1/1 | 0/0                                          |                                                              |
| Heptanol, 1-                        | C <sub>7</sub> H <sub>16</sub> O                                 | 000111-70-6 | —             | Xn          |                      | 0/0  | 0/0  | (2)  | (2) | (1)  | 0/0  | (1) | (2) | 0/0 | 0/0                | 0/0      | 1/3       | 0/0            | (1)          | (1) | (1)          | 4/4  | (1)   | 1/0       | 0/0         | (1)     | (1) | (1) |     |                                              |                                                              |
| Heptanone                           | C <sub>7</sub> H <sub>14</sub> O                                 | —           | —             | (Xn)        | X                    | 0/0  | 0/0  | (3)  | (4) | (4)  | (4)  | (2) | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | (4)   | (4)       | 4/4         | 0/0     | (1) | (1) | (1) |                                              | isomer not indicated in the source                           |
| Hexachlorbenzene (HCB)              | C <sub>6</sub> Cl <sub>6</sub>                                   | 000118-74-1 | —             | T           |                      | 0/0  | 0/0  | (3)  | (4) | 0/0  | (4)  | 1/0 | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 1/1            | 0/0          | (1) | (2)          | 0/0  | 4/4   | (3)       | 4/4         | 0/0     | (1) | 0/0 | 0/0 |                                              |                                                              |
| Hexachlorocyclohexane (alpha-BHC)   | C <sub>6</sub> H <sub>6</sub> Cl <sub>6</sub>                    | 000319-84-6 | —             | T           |                      | 0/0  | 0/0  | (3)  | (4) | 0/0  | 0/0  | (3) | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (2)          | 0/0  | 4/4   | 1/0       | 4/4         | 0/0     | (3) | 0/0 | 0/0 |                                              |                                                              |
| Hexahydropyridine                   | -> see: Piperidine                                               |             |               |             |                      |      |      |      |     |      |      |     |     |     |                    |          |           |                |              |     |              |      |       |           |             |         |     |     |     |                                              |                                                              |
| Hexaldehyde, n-                     | C <sub>6</sub> H <sub>12</sub> O                                 | 000066-25-1 | —             | F, Xi       | X                    | 0/0  | 0/0  | 0/0  | (4) | 0/0  | 0/0  | (2) | (2) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 3/0   | 4/4       | 4/4         | 0/0     | (1) | (1) | (1) |                                              |                                                              |
| Hexamethylenetetramine              | C <sub>6</sub> H <sub>12</sub> N <sub>4</sub>                    | 000100-97-0 | —             | F, Xn       | X                    | 0/0  | 0/0  | (2)  | (2) | 1/0  | 0/0  | (2) | (2) | 1/1 | 0/0                | 0/0      | 0/0       | 1/1            | 0/0          | (1) | (1)          | (2)  | (2)   | (2)       | (3)         | 0/0     | (1) | 1/1 | 1/1 | 0/0                                          | Methenamine; Hexamine; Urotropin                             |
| Hexane, n-                          | C <sub>6</sub> H <sub>14</sub>                                   | 000110-54-3 | —             | F, Xn       | X                    | 2/3  | 4/4  | 1/0  | (2) | 1/0  | 3/4  | 1/1 | 2/3 | 4/4 | 1/2                | 2/4      | 4/4       | 1/1            | 1/1          | 1/1 | 1/1          | 4/4  | 1/1   | 1/1       | 0/0         | 1/1     | 1/1 | 1/1 | 0/0 |                                              |                                                              |
| Hexanedioic acid                    | -> see: Adipic acid                                              |             |               |             |                      |      |      |      |     |      |      |     |     |     |                    |          |           |                |              |     |              |      |       |           |             |         |     |     |     |                                              |                                                              |
| Hexanetriol                         | C <sub>6</sub> H <sub>14</sub> O <sub>3</sub>                    | —           | 100 %         | ?           |                      | 1/1  | 1/1  | (2)  | (2) | (1)  | 0/0  | (1) | 1/1 | 1/0 | 0/0                | 1/1      | 3/3       | 1/1            | 0/0          | (1) | 1/1          | (1)  | 1/0   | 1/0       | 0/0         | (1)     | (1) | (1) | 0/0 | isomer not indicated in the source           |                                                              |
| Hexene, 1-                          | C <sub>6</sub> H <sub>12</sub>                                   | 000592-41-6 | —             | F, Xn       | X                    | 0/0  | 0/0  | 1/0  | (2) | (1)  | (4)  | (1) | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (            |      |       |           |             |         |     |     |     |                                              |                                                              |

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| CHEMICALS             | FORMULA                                          | CAS-NR.     | CONCENTRATION | HAZARD NOTE | FLAMMABLE | thermoplastics ----- |      |       |     |      |      |     |     |     |     |          |           |     |              |     |      | --- fluoroplastics --- |      |           |     | --- elastomers --- |     |      |      | ----- metals ----- |     |     |          | Hastelloy C | COMMENT              |                                                |
|-----------------------|--------------------------------------------------|-------------|---------------|-------------|-----------|----------------------|------|-------|-----|------|------|-----|-----|-----|-----|----------|-----------|-----|--------------|-----|------|------------------------|------|-----------|-----|--------------------|-----|------|------|--------------------|-----|-----|----------|-------------|----------------------|------------------------------------------------|
|                       |                                                  |             |               |             |           | HDPE                 | LDPE | PA    | PC  | PETG | PMPP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN | ECTFE / ETFE | FEP | PTFE | PVDF                   | EPDM | FPM / FKM | NBR | SI                 | AL  | V2A  | V4A  |                    |     |     |          |             |                      |                                                |
| Isopropyl carbinol    | -> see: Isobutanol                               |             |               |             |           |                      |      |       |     |      |      |     |     |     |     |          |           |     |              |     |      |                        |      |           |     |                    |     |      |      |                    |     |     |          |             |                      |                                                |
| Isopropyl chloride    | C <sub>3</sub> H <sub>7</sub> Cl                 | 000075-29-6 |               | F, Xn       | X         | 0/0                  | 0/0  | (2)   | (4) | 0/0  | (4)  | (2) | (3) | 4/4 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | (1)  | (2)                    | 4/4  | 1/0       | 4/4 | 0/0                | (3) | 0/0  | 0/0  |                    |     |     |          |             |                      |                                                |
| Jam                   | —                                                | —           |               | —           |           | 1/1                  | 1/1  | (1)   | 1/1 | 1/1  | 0/0  | (2) | 1/1 | 1/1 | 0/0 | 1/3      | 0/0       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/1  | (2)       | (1) | (1)                | 0/0 | (2)  | 1/1  | 1/1                | 1/1 | 1/1 |          |             |                      |                                                |
| Juices                | —                                                | —           |               | —           |           | 1/1                  | 1/1  | 1/0   | 1/0 | 1/0  | 1/0  | 1/1 | 1/1 | 1/0 | 0/0 | 1/1      | 1/1       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1                    | 1/0  | 1/1       | 1/1 | 0/0                | (2) | 1/1  | 1/1  | 1/1                | 1/1 |     |          |             |                      |                                                |
| Kapsolat              | -> see: Ethylene glycol monomethyl ether oleate  |             |               |             |           |                      |      |       |     |      |      |     |     |     |     |          |           |     |              |     |      |                        |      |           |     |                    |     |      |      |                    |     |     |          |             |                      |                                                |
| Kerosene              | —                                                | 008008-20-6 |               | (Xn)        |           | 2/2                  | 3/4  | (1)   | 4/4 | 1/1  | 2/3  | 1/1 | 3/3 | 4/4 | 2/3 | 1/1      | 0/0       | 2/3 | 1/1          | 1/1 | 1/1  | 1/1                    | 4/4  | 1/0       | 1/0 | 0/0                | 1/1 | 1/1  | 1/1  | 1/1                | 1/1 | 0/0 | lamp oil |             |                      |                                                |
| Kerosene              | —                                                | —           | techn. pure   | Xn, N       | X         | 1/3                  | 3/4  | 1/0   | 3/0 | (1)  | 0/0  | 1/1 | 1/3 | 4/4 | 1/0 | 1/0      | 3/0       | 3/4 | 0/0          | (1) | 1/1  | 1/1                    | 4/4  | 1/0       | 1/1 | 0/0                | 1/1 | 1/1  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      |             |                      |                                                |
| Lactames              | —                                                | —           |               | ?           |           | 0/0                  | 0/0  | 0/0   | 0/0 | 0/0  | 0/0  | 0/0 | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 0/0 | (1)  | 0/0                    | 4/4  | 4/4       | 4/4 | 0/0                | (2) | (1)  | (1)  |                    |     |     |          |             |                      | cyclic amides                                  |
| Lactic acid           | C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>     | 000050-21-5 | 3 %           | ?           |           | 1/1                  | 1/2  | (3)   | 1/2 | 1/0  | 1/2  | 2/4 | 1/2 | 2/2 | 1/1 | 2/3      | 0/0       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1                    | 3/4  | 1/1       | (2) | 0/0                | (1) | 1/1  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | lactol               |                                                |
| Lactic acid           | C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>     | 000050-21-5 | 80 %          | C           |           | 1/1                  | 1/1  | 3/4   | 1/2 | 0/0  | 1/2  | 3/4 | 1/1 | 1/1 | 1/1 | 2/3      | 2/3       | 1/1 | 1/2          | 1/1 | 1/1  | 1/3                    | 3/4  | 1/1       | 1/4 | 0/0                | 1/0 | 1/3  | 1/2  | 1/1                | 1/1 | 1/1 | 1/1      | lactol      |                      |                                                |
| Lactic acid           | C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>     | 000050-21-5 | 85 %          | C           |           | 1/1                  | 1/1  | 3/4   | 1/2 | 0/0  | 1/2  | 3/4 | 1/2 | 2/2 | 1/1 | 2/3      | 2/3       | 1/1 | 1/2          | 1/1 | 1/1  | 1/3                    | 3/4  | 1/1       | 1/4 | 0/0                | 1/0 | 1/3  | 1/2  | 1/1                | 1/1 | 1/1 | 1/1      | lactol      |                      |                                                |
| Lactose               | C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>  | 000063-42-3 | aqueous       | —           |           | 1/1                  | 1/1  | 1/1   | 1/1 | 1/1  | 1/1  | 1/1 | 1/1 | 1/1 | 0/0 | 1/1      | 1/1       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/1  | 1/1       | 1/1 | 1/1                | (1) | 1/1  | 1/1  | 1/1                | 0/0 |     |          |             |                      |                                                |
| Lanolin               | —                                                | 008006-54-0 | techn. pure   | —           |           | 3/3                  | 3/3  | 1/0   | 1/0 | 1/0  | 0/0  | (2) | 3/3 | 1/1 | 0/0 | 3/3      | 1/1       | 0/0 | (1)          | 1/1 | 1/1  | 4/4                    | 1/1  | 1/1       | 0/0 | (1)                | 1/1 | 1/1  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         |                      |                                                |
| Lard                  | —                                                | —           |               | —           |           | 0/0                  | 0/0  | (2)   | (1) | 1/0  | 0/0  | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | 1/1                    | 2/0  | 1/0       | 1/0 | 0/0                | (1) | 1/1  | 1/1  |                    |     |     |          |             |                      |                                                |
| Latex                 | —                                                | —           |               | ?           |           | 0/0                  | 0/0  | 1/0   | (2) | (2)  | 0/0  | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | 1/1 | (1)  | (3)                    | (1)  | (2)       | 0/0 | (2)                | (1) | (1)  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | dispersion of rubber |                                                |
| Laurel                | —                                                | —           | ground        | ?           |           | 0/0                  | 0/0  | (2)   | (2) | 0/0  | (2)  | 0/0 | (2) | 1/1 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | (1) | (1)  | (2)                    | (1)  | (2)       | 0/0 | (1)                | (1) |      |      |                    |     |     |          |             |                      |                                                |
| Lauryl alcohol        | C <sub>12</sub> H <sub>26</sub> O                | 000112-53-8 | 100 %         | Xi          |           | 0/0                  | 0/0  | (2)   | (2) | 1/0  | 0/0  | (2) | 1/1 | 1/1 | 0/0 | 1/1      | 0/0       | 1/1 | 0/0          | (1) | 1/1  | 1/1                    | 3/0  | 1/0       | 3/3 | 0/0                | (1) | (1)  | (1)  | 0/0                |     |     |          |             |                      |                                                |
| Lauryl chloride       | C <sub>12</sub> H <sub>25</sub> Cl               | 000112-52-7 | 100 %         | (Xi)        |           | 0/0                  | 0/0  | (2)   | (3) | 0/0  | 0/0  | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | 1/0 | (1)  | 4/4                    | (1)  | (3)       | 0/0 | (3)                | 0/0 |      |      |                    |     |     |          |             |                      |                                                |
| Lavender oil          | —                                                | 008000-28-0 |               | (Xi)        |           | 0/0                  | 0/0  | (2)   | (3) | 0/0  | (4)  | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | (1)  | (2)                    | 4/4  | 1/0       | 3/0 | 0/0                | (1) | (1)  | (1)  |                    |     |     |          |             |                      |                                                |
| Lead acetate          | C <sub>2</sub> H <sub>3</sub> PbO <sub>4</sub>   | 000301-04-2 | aqueous       | T, N        |           | 1/1                  | 1/1  | 3/0   | 1/0 | (2)  | 1/0  | 1/0 | 1/1 | 1/1 | 0/0 | 1/1      | 1/1       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/0  | 2/2       | 3/0 | 0/0                | 4/4 | 1/1  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | 1/1                  |                                                |
| Lead acetate          | C <sub>2</sub> H <sub>3</sub> PbO <sub>4</sub>   | 000301-04-2 |               | T, N        |           | 1/1                  | 1/1  | 3/0   | 1/0 | (2)  | 0/0  | 1/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/0  | 2/2       | 0/0 | 4/4                | 1/1 | 1/1  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | 1/1                  |                                                |
| Lead nitrate          | Pb(NO <sub>3</sub> ) <sub>2</sub>                | 010099-74-8 | aqueous       | O, T, N     |           | 1/1                  | 1/1  | (3)   | (2) | (2)  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/0  | 1/0       | 1/0 | 0/0                | 1/1 | 1/0  | 1/0  | 1/0                | 1/0 | 1/0 | 1/1      | 1/1         | 1/1                  |                                                |
| Lead nitrate          | Pb(NO <sub>3</sub> ) <sub>2</sub>                | 010099-74-8 |               | O, T, N     |           | 1/1                  | 1/1  | (3)   | (2) | (2)  | 0/0  | (2) | 1/1 | 1/1 | 0/0 | 0/0      | 1/1       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/0  | 1/0       | 1/0 | 0/0                | 1/1 | 1/0  | 1/0  | 1/0                | 1/0 | 1/0 | 1/1      | 1/1         | 1/1                  |                                                |
| Lead stearate         | C <sub>36</sub> H <sub>70</sub> PbO <sub>4</sub> | 001072-35-1 |               | ?           |           | 1/1                  | 1/1  | (2)   | (1) | (1)  | 0/0  | (1) | 1/1 | 1/1 | 0/0 | 0/0      | 0/0       | 1/1 | 1/1          | 1/1 | 1/1  | (1)                    | (2)  | (1)       | (2) | 0/0                | (1) | (1)  | (1)  |                    |     |     |          |             |                      | small solubility - no chemical effect expected |
| Lead sulfate          | PbSO <sub>4</sub>                                | 007446-14-2 |               | (T, N)      |           | 1/1                  | 1/1  | (2)   | (1) | (1)  | 0/0  | (1) | 1/1 | 1/1 | 0/0 | 0/0      | 0/0       | 0/0 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/1  | 1/1       | (2) | 0/0                | (1) | (1)  | (1)  | 0/0                |     |     |          |             |                      | small solubility - no chemical effect expected |
| Lead tetraethyl (TEL) | C <sub>8</sub> H <sub>20</sub> Pb                | 000078-00-2 | techn. pure   | T, X        | X         | 1/0                  | 1/0  | 1/4   | 3/0 | (2)  | (4)  | (2) | 2/4 | 0/0 | 0/0 | 1/0      | 0/0       | 0/0 | 0/0          | (1) | 1/0  | 1/1                    | 4/4  | 1/0       | 3/0 | 0/0                | (2) | (1)  | (1)  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | 1/1                  |                                                |
| Lemon juice           | —                                                | —           |               | —           |           | 1/1                  | 1/1  | 1/0   | 1/0 | (2)  | 0/0  | 1/0 | 1/1 | 1/1 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1 | 1/1  | (1)                    | (1)  | 1/0       | 1/1 | 0/0                | (1) | 1/1  | 1/1  |                    |     |     |          |             |                      |                                                |
| Lemon oil             | —                                                | 084929-31-7 |               | Xi          | (X)       | 0/0                  | 0/0  | (2)   | (3) | 1/0  | (4)  | (2) | (3) | 4/4 | 0/0 | 0/0      | 0/0       | 3/3 | 0/0          | 1/0 | (1)  | (2)                    | 4/4  | (2)       | 3/3 | 0/0                | 1/1 | (1)  | (1)  |                    |     |     |          |             |                      | mainly limonene                                |
| Lemongrass oil        | —                                                | 008007-02-1 |               | (Xi)        |           | 0/0                  | 0/0  | (2)   | (3) | 0/0  | (4)  | (2) | (3) | 4/4 | 0/0 | 0/0      | 0/0       | 4/4 | 0/0          | (1) | (1)  | (3)                    | 4/4  | (3)       | (4) | 0/0                | (1) | (1)  |      |                    |     |     |          |             |                      |                                                |
| Ligroin               | —                                                | 008032-32-4 |               | F, Xn       | X         | 0/0                  | 0/0  | (2)   | 1/0 | (2)  | (4)  | (2) | (3) | 3/3 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | (1) | 1/1  | 1/1                    | 4/4  | 1/0       | 1/0 | 0/0                | 1/1 | 1/1  | 1/1  |                    |     |     |          |             |                      | petroleum ether                                |
| Lime chloride         | [3 x CaCl(OCl)] + Ca —                           | —           | aqueous       | ?           |           | 0/0                  | 0/0  | 4/4   | (2) | 3/0  | 0/0  | 4/4 | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | 1/1  | 1/1                    | 1/0  | 1/1       | 4/4 | 0/0                | 4/4 | 2/0L | 2/0L | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | 1/1                  | chloride of lime, bleach                       |
| Lime chloride         | [3 x CaCl(OCl)] + Ca —                           | —           |               | O, C        |           | 0/0                  | 0/0  | 4/4   | (2) | 3/0  | 0/0  | 4/4 | 1/1 | 1/3 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | (1) | 1/1  | 1/1                    | 1/0  | 1/1       | 4/4 | 0/0                | 4/4 | 2/0L | 2/0L | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | 1/1                  | chloride of lime, bleach                       |
| Limone, DL-           | C <sub>10</sub> H <sub>16</sub>                  | 000138-86-3 |               | Xn          | X         | 0/0                  | 0/0  | (1)   | (3) | (2)  | (4)  | (1) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | (1)  | (1)                    | 4/4  | 1/0       | 3/3 | 0/0                | 1/1 | 1/1  | 1/1  |                    |     |     |          |             |                      |                                                |
| Linseed oil           | —                                                | 008001-26-1 | techn. pure   | —           |           | 1/1                  | 1/3  | 1/0   | 1/0 | 1/0  | 1/1  | 1/1 | 1/1 | 1/1 | 0/0 | 1/3      | 1/0       | 1/1 | 0/0          | (1) | 1/1  | 1/1                    | 4/4  | 1/1       | 1/1 | 0/0                | (1) | 1/1  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | 1/1                  |                                                |
| Liqueurs              | —                                                | —           |               | —           |           | 1/0                  | 0/0  | (2)   | 1/0 | 1/0  | 0/0  | (2) | 1/0 | 0/0 | 0/0 | 1/0      | 0/0       | 0/0 | 0/0          | (1) | 1/1  | 1/1                    | 1/0  | 1/0       | 1/1 | 0/0                | (1) | 1/1  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | 1/1                  |                                                |
| Lithium bromide       | LiBr                                             | 007550-35-8 |               | Xn          |           | 1/1                  | 1/1  | (3)   | (2) | 1/0  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | 1/1  | (1)                    | 1/0  | 1/0       | 1/0 | 0/0                | (3) | 0/0  | 0/0  |                    |     |     |          |             |                      |                                                |
| Lube oils             | —                                                | —           |               | ?           |           | 1/3                  | 2/3  | (2-3) | (1) | (2)  | 0/0  | (2) | 3/0 | 0/0 | 0/0 | 1/1      | 1/3       | 0/0 | 0/0          | (1) | 1/1  | 1/1                    | 4/4  | 1/1       | 1/0 | 0/0                | 1/1 | 1/1  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | 0/0                  |                                                |
| Lysol                 | —                                                | —           |               | T           |           | 0/0                  | 0/0  | (4)   | (3) | 0/0  | 0/0  | (3) | 1/3 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | (1)  | (2)                    | (3)  | (3)       | (3) | 0/0                | (3) | 1/1  | 1/1  |                    |     |     |          |             |                      | disinfectant, cresol + soap                    |
| Machine oil           | —                                                | —           | 100 %         | ?           |           | 0/0                  | 1/4  | (1)   | (2) | 1/0  | 0/0  | 1/1 | 1/3 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1) | 1/1  | 1/1                    | 4/4  | 1/0       | 1/0 | 0/0                | 1/1 | 1/1  | 1/1  |                    |     |     |          |             |                      |                                                |
| Magnesium bromide     | MgBr <sub>2</sub>                                | 007789-48-2 |               | Xi          |           | 1/1                  | 1/1  | (2)   | (2) | (1)  | 0/0  | 1/1 | 1/1 | 1/1 | 0/0 | 0/0      | 0/0       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/1  | (1)       | (2) | 0/0                | (3) | 0/0  | 0/0  |                    |     |     |          |             |                      |                                                |
| Magnesium carbonate   | MgCO <sub>3</sub>                                | 000546-93-0 | saturated     | —           |           | 1/1                  | 1/1  | 1/0   | 1/0 | 1/1  | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1      | 1/1       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/1  | 1/1       | 1/1 | 1/1                | 1/1 | 1/1  | 1/1  | 1/1                | 1/1 | 1/1 | 1/1      | 1/1         | 1/1                  |                                                |
| Magnesium chloride    | MgCl <sub>2</sub>                                | 007786-30-3 | aqueous       | Xi          |           | 1/1                  | 1/1  | 1/0   | 1/0 | 1/0  | 1/0  | 1/2 | 1/1 | 1/1 | 1/0 | 1/1      | 1/0       | 1/1 | 1/1          | 1/1 | 1/1  | 1/1                    | 1/1  | 1/1       | 1/1 | 1/0                | 1/1 | 1/1  | 1/0L | 1/0L               | 1/1 | 1/1 | 1/1      | 1/1         | 1/1                  |                                                |
| Magnesium chlorite    | Mg(ClO <sub>2</sub> ) <sub>2</sub>               | ??          |               | O           |           | 0/0                  | 0/0  | 0/0   | 0/0 | 0/0  | 0/0  | 1/1 | 0/0 | 0/0 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | 0/0 | 1/1  | 0/0                    | 0/0  | 0/0       | 0/0 | 0/0                | 1/1 |      |      |                    |     |     |          |             |                      |                                                |

| CHEMICALS                  | FORMULA                                                      | CAS-NR.     | CONCENTRATION | HAZARD NOTE | FLAMMABLE | thermoplastics ----- |      |     |     |      |      |     |     |     |     |          |           |     |              | fluoroplastics --- |      |      | elastomers --- |           |     | metals ----- |     |                      |                      | Hastelloy C                               | COMMENT                                                                                                                                                                                               |
|----------------------------|--------------------------------------------------------------|-------------|---------------|-------------|-----------|----------------------|------|-----|-----|------|------|-----|-----|-----|-----|----------|-----------|-----|--------------|--------------------|------|------|----------------|-----------|-----|--------------|-----|----------------------|----------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            |                                                              |             |               |             |           | HDPE                 | LDPE | PA  | PC  | PETG | PMPP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN | ECTFE / ETFE | FEP                | PTFE | PVDF | EPDM           | FPM / FKM | NBR | SI           | AL  | V2A                  | V4A                  |                                           |                                                                                                                                                                                                       |
| Methane                    | CH <sub>4</sub>                                              | 000074-82-8 | techn. pure   | F+          | X         | 1/0                  | 0/0  | 1/0 | 1/0 | 1/0  | 0/0  | 1/0 | 1/0 | 0/0 | 0/0 | 1/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | 1/1  | 4/4            | 1/0       | 1/0 | 0/0          | 1/1 | 1/1                  | 1/1                  | 0/0                                       |                                                                                                                                                                                                       |
| Methanoic acid             | -> see: Formic acid                                          |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methenamine                | -> see: Hexamethylenetetramine                               |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methoxy butanol            | C <sub>5</sub> H <sub>12</sub> O <sub>2</sub>                | —           | 100 %         | ?           | X         | 0/0                  | 1/3  | (2) | (3) | 0/0  | 0/0  | (2) | 1/3 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | (2)  | 3/0            | 1/0       | 1/0 | 0/0          | (1) | (1)                  | (1)                  |                                           | isomer not indicated in the source                                                                                                                                                                    |
| Methoxyethane              | C <sub>3</sub> H <sub>8</sub> O                              | 000540-67-0 | 100 %         | (F+)        | X         | 0/0                  | 3/0  | (1) | (4) | 0/0  | (4)  | (2) | (3) | 4/4 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/0  | (2)  | 4/4            | 4/4       | 4/4 | 0/0          | 1/1 | (1)                  | (1)                  |                                           | Methyl ethyl ether;                                                                                                                                                                                   |
| Methoxyethyl oleate        | -> see: Ethylene glycol monomethyl ether oleate              |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methyl acetate             | C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>                 | 000079-20-9 | techn. pure   | F           | X         | 1/0                  | 1/1  | 1/0 | 4/4 | 3/0  | (4)  | 2/0 | 1/3 | 4/4 | 0/0 | 4/4      | 4/4       | 4/4 | 0/0          | 1/0                | 1/1  | 1/4  | 3/0            | 4/4       | 4/4 | 0/0          | (1) | 1/1                  | 1/1                  | 0/0                                       |                                                                                                                                                                                                       |
| Methyl acrylate            | C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>                 | 000096-33-3 |               | F, Xn       | X         | 0/0                  | 0/0  | (2) | 4/4 | (4)  | (4)  | (2) | (2) | 4/4 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (3)  | 4/4            | 4/4       | 4/4 | 0/0          | (1) | (1)                  | (1)                  |                                           |                                                                                                                                                                                                       |
| Methyl alcohol             | CH <sub>3</sub> O                                            | 000067-56-1 |               | F, T        | X         | 1/1                  | 1/1  | 2/0 | 4/4 | 1/0  | 1/1  | 1/1 | 1/1 | 3/4 | 3/3 | 1/3      | 3/3       | 3/4 | 1/1          | 1/1                | 1/1  | 1/0  | 3/4            | 3/3       | 0/0 | 1/0          | 1/1 | 1/1                  |                      |                                           |                                                                                                                                                                                                       |
| Methyl amine               | CH <sub>3</sub> N                                            | 000074-89-5 | 32 %          | F+, C       | X         | 1/0                  | 1/0  | 4/4 | 4/4 | 0/0  | 0/0  | 1/0 | 1/0 | 0/0 | 0/0 | 3/0      | 4/4       | 0/0 | 0/0          | (1)                | 1/0  | 3/0  | 1/0            | 4/4       | 4/4 | 0/0          | 1/0 | 1/0                  | 1/0                  | 0/0                                       |                                                                                                                                                                                                       |
| Methyl benzene             | C <sub>7</sub> H <sub>8</sub>                                | 000108-88-3 |               | F, Xn       | X         | 3/4                  | 3/4  | 1/0 | 4/4 | 1/0  | 3/3  | 1/3 | 3/4 | 4/4 | 4/4 | 4/4      | 4/4       | 1/1 | 1/1          | 1/0                | 1/1  | 4/4  | 3/3            | 4/4       | 0/0 | 1/1          | 1/1 | 1/1                  | 1/1                  |                                           |                                                                                                                                                                                                       |
| Methyl bromide             | CH <sub>3</sub> Br                                           | 000074-83-9 | techn. pure   | T           |           | 3/0                  | 4/4  | 1/0 | (3) | 0/0  | 0/0  | 1/0 | 4/4 | 4/4 | 0/0 | 4/4      | 4/4       | 0/0 | 0/0          | 1/0                | 1/0  | 1/1  | 4/4            | 1/0       | 4/4 | 0/0          | 4/4 | 1/1L                 | 1/1L                 | 0/0                                       |                                                                                                                                                                                                       |
| Methyl butanol             | C <sub>5</sub> H <sub>12</sub> O                             | —           |               | Xn          | X         | 0/0                  | 0/0  | (2) | (2) | 1/0  | 0/0  | 1/0 | 1/1 | 0/0 | 0/0 | 0/0      | 1/3       | 0/0 | (1)          | 1/1                | 1/1  | 3/0  | 2/2            | 3/3       | 0/0 | (1)          | (1) | (1)                  |                      | isomer not indicated in the source        |                                                                                                                                                                                                       |
| Methyl butyl ketone        | C <sub>8</sub> H <sub>16</sub> O                             | 000591-78-6 |               | F, T        | X         | 0/0                  | 0/0  | (2) | (4) | (4)  | (4)  | (2) | (3) | 4/4 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (3)  | 1/0            | 4/4       | 4/4 | 0/0          | (1) | (1)                  | (1)                  |                                           |                                                                                                                                                                                                       |
| Methyl cellosolveat oleate | -> see: Ethylene glycol monomethyl ether oleate              |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methyl chloride            | CH <sub>3</sub> Cl                                           | 000074-87-3 | techn. pure   | F+, T       | X         | 3/0                  | 2/0  | 4/4 | (3) | 0/0  | 0/0  | 1/0 | 4/4 | 4/4 | 4/4 | 4/4      | 4/4       | 4/4 | 0/0          | 1/0                | 1/0  | 1/1  | 4/4            | 4/4       | 4/4 | 0/0          | 4/4 | (1/1L) <sup>1)</sup> | (1/1L) <sup>1)</sup> |                                           | <sup>1)</sup> Water-free! If even traces of hydrochloric acid (HCl) are split off by moisture, there is a risk of pitting, crevice and stress corrosion cracking.                                     |
| Methyl cyanide             | -> see: Acetonitrile                                         |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methyl dichloroacetate     | C <sub>3</sub> H <sub>2</sub> Cl <sub>2</sub> O <sub>2</sub> | 000116-54-1 |               | (Xn)        |           | 1/1                  | 0/0  | (3) | (4) |      | (4)  | (3) | 1/1 | 0/0 | 0/0 | 4/4      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 3/3  | 4/4            | 4/4       | 4/4 | 0/0          | (3) | 0/0                  | 0/0                  |                                           |                                                                                                                                                                                                       |
| Methyl ethyl carbinol      | -> see: Butyl alcohol, sec-                                  |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methyl ethyl ether         | -> see: Methoxyethane                                        |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methyl ethyl ketone (MEK)  | C <sub>4</sub> H <sub>8</sub> O                              | 000078-93-3 |               | F           | X         | 1/3                  | 3/4  | 1/0 | 4/4 | 4/4  | 4/4  | 1/2 | 1/3 | 4/4 | 4/4 | 4/4      | 4/4       | 2/3 | 1/1          | 1/1                | 3/4  | 3/0  | 4/4            | 4/4       | 0/0 | (1)          | (1) | (1)                  | 0/0                  |                                           |                                                                                                                                                                                                       |
| Methyl ethylene oxide      | -> see: Propylene oxid                                       |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methyl formate             | C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>                 | 000107-31-3 |               | F+          | X         | 0/0                  | 0/0  | (2) | 4/4 | 0/0  | (4)  | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (3)  | 2/0            | 4/4       | 4/4 | 0/0          | (1) | (1)                  | (1)                  | 0/0                                       |                                                                                                                                                                                                       |
| Methyl isobutyl ketone     | C <sub>8</sub> H <sub>16</sub> O                             | 000108-10-1 |               | F           | X         | 1/2                  | 2/3  | 1/0 | 4/4 | (4)  | 3/3  | (2) | 2/4 | 4/4 | 4/4 | 4/4      | 4/4       | 2/3 | 1/1          | 1/1                | (3)  | 4/4  | 4/4            | 4/4       | 0/0 | (1)          | (1) | (1)                  | 0/0                  |                                           |                                                                                                                                                                                                       |
| Methyl isopropyl ketone    | C <sub>8</sub> H <sub>16</sub> O                             | 000563-80-4 |               | F           | X         | 0/0                  | 0/0  | (2) | 4/4 | (4)  | (4)  | (2) | (3) | 4/4 | 0/0 | 0/0      | 0/0       | 4/4 | 0/0          | (1)                | (1)  | (3)  | 3/0            | 4/4       | 4/4 | 0/0          | (1) | (1)                  | (1)                  |                                           |                                                                                                                                                                                                       |
| Methyl ketone              | -> see: Acetone                                              |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methyl methacrylate        | C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>                 | 000080-62-6 | 100 %         | F, Xi       | X         | 0/0                  | 0/0  | (2) | 4/4 | (4)  | (4)  | (2) | (2) | 4/4 | 0/0 | 4/4      | 4/4       | 0/0 | 0/0          | 1/0                | 1/1  | (3)  | 4/4            | 4/4       | 4/4 | 0/0          | 1/1 | (1)                  | (1)                  | 0/0                                       |                                                                                                                                                                                                       |
| Methyl propyl ketone       | C <sub>6</sub> H <sub>12</sub> O                             | 000107-87-9 |               | (F)         | X         | 1/2                  | 2/3  | (2) | 4/4 | (4)  | 3/3  | (2) | 2/3 | 4/4 | 4/4 | 4/4      | 0/0       | 4/4 | 1/2          | 1/1                | (1)  | (2)  | (3)            | 4/4       | 4/4 | 0/0          | (1) | (1)                  | (1)                  |                                           |                                                                                                                                                                                                       |
| Methyl salicylate          | C <sub>8</sub> H <sub>8</sub> O <sub>3</sub>                 | 000119-36-8 |               | Xn, Xi      |           | 0/0                  | 0/0  | (3) | (3) | 0/0  | 0/0  | (3) | 1/0 | 4/4 | 0/0 | 0/0      | 0/0       | 4/4 | 0/0          | (1)                | (1)  | (3)  | 2/0            | (3)       | 4/4 | 0/0          | (2) | (1)                  | 0/0                  |                                           | synthetic oil of wintergreen                                                                                                                                                                          |
| Methyl sulfuric acid       | CH <sub>3</sub> SO <sub>4</sub>                              | 000077-78-1 | 50 %          | (C)         |           | 0/0                  | 1/1  | 4/4 | (4) | (4)  | 0/0  | 4/4 | 2/4 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | (2)  | 1/0            | 4/4       | 4/4 | 0/0          | (4) | 0/0                  | 0/0                  | 4/4                                       |                                                                                                                                                                                                       |
| Methyl sulfuric acid       | CH <sub>3</sub> SO <sub>4</sub>                              | 000077-78-1 | aqueous       | (C)         |           | 0/0                  | 0/0  | 4/4 | (4) | (4)  | 0/0  | 4/4 | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | (2)  | 1/0            | 4/4       | 4/4 | 0/0          | (4) | 0/0                  | 0/0                  | 4/4                                       |                                                                                                                                                                                                       |
| Methyl-1-propanol, 2-      | -> see: Isobutanol                                           |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methylchloroacetate        | C <sub>3</sub> H <sub>5</sub> ClO <sub>2</sub>               | 000096-34-4 | techn. pure   | T/Xi        | X         | 1/1                  | 0/0  | (3) | 4/4 | (4)  | (4)  | (3) | 1/1 | 4/4 | 0/0 | 3/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | 1/4  | 3/0            | 4/4       | 4/4 | 0/0          | 3/4 | 0/0                  | 0/0                  | 0/0                                       |                                                                                                                                                                                                       |
| Methylcyclohexane          | C <sub>7</sub> H <sub>14</sub>                               | 000108-87-2 |               | F, Xn       | X         | 3/0                  | 3/0  | (2) | (2) | 1/0  | (4)  | (2) | 3/0 | 0/0 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | (1)                | 1/0  | (1)  | 4/4            | (1)       | 4/4 | 0/0          | 1/1 | 1/1                  | 1/1                  | 0/0                                       |                                                                                                                                                                                                       |
| Methylcyclopentane         | C <sub>6</sub> H <sub>12</sub>                               | 000096-37-7 |               | F           | X         | 0/0                  | 0/0  | (2) | (2) | 1/0  | (4)  | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (1)  | 4/4            | 1/0       | 4/4 | 0/0          | 1/1 | 1/1                  | 1/1                  |                                           |                                                                                                                                                                                                       |
| Methylene chloride         | CH <sub>2</sub> Cl <sub>2</sub>                              | 000075-09-2 |               | Xn          |           | 4/4                  | 4/4  | 3/4 | 4/4 | 4/4  | 3/4  | 3/4 | 3/4 | 4/4 | 4/4 | 4/4      | 4/4       | 4/4 | 2/2          | 1/1                | 1/1  | 1/3  | 4/4            | 3/3       | 4/4 | 0/0          | 4/4 | 1/1L                 | 1/1L                 | 1/1                                       |                                                                                                                                                                                                       |
| Methylglycol acetate       | C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>                | 000110-49-6 |               | T           |           | 0/0                  | 0/0  | 1/0 | (3) | 0/0  | 0/0  | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | (2)  | 3/0            | 4/4       | 4/4 | 0/0          | (1) | (1)                  | (1)                  |                                           |                                                                                                                                                                                                       |
| Methyloxirane              | -> see: Propylene oxid                                       |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Methylpropyl acetate, 2-   | -> see: Isobutyl acetate                                     |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Milk                       | —                                                            | —           |               |             |           | 1/1                  | 1/1  | 1/0 | 1/0 | 1/1  | 1/0  | 1/1 | 1/1 | 1/1 | 1/0 | 1/1      | 1/1       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 3/0            | 1/0       | 1/0 | 0/0          | (1) | 1/1                  | 1/1                  | 1/1                                       |                                                                                                                                                                                                       |
| Mineral oil                | —                                                            | 008012-95-1 |               | (Xn)        |           | 1/1                  | 2/4  | (1) | 1/2 | 1/1  | 1/2  | 1/1 | 1/3 | 1/1 | 1/1 | 1/2      | 0/0       | 0/0 | 1/1          | 1/1                | 1/1  | 1/1  | 4/4            | 1/1       | 2/2 | 0/0          | 1/1 | 1/1                  | 1/1                  | 0/0                                       |                                                                                                                                                                                                       |
| Mineral water              | —                                                            | —           |               |             |           | 1/1                  | 1/1  | (1) | 1/0 | 1/1  | 0/0  | 1/1 | 1/1 | 0/0 | 0/0 | 1/1      | 0/0       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 1/1            | 1/1       | 0/0 | (1)          | (1) | (1)                  | 1/1                  |                                           |                                                                                                                                                                                                       |
| Molasses                   | —                                                            | —           |               |             |           | 1/1                  | 1/1  | 1/0 | (1) | 1/0  | 0/0  | 2/0 | 1/1 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | 1/1          | 1/1                | 1/1  | 1/1  | 1/0            | 1/0       | 1/1 | 0/0          | 1/0 | 1/0                  | 1/0                  | 3/4                                       |                                                                                                                                                                                                       |
| Molasses wort              | —                                                            | —           |               | ?           |           | 1/1                  | 1/1  | 1/0 | (2) | (2)  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 1/1      | 0/0       | 0/0 | 1/1          | 1/1                | 1/1  | 1/1  | 1/0            | 1/0       | 1/1 | 0/0          | (2) | (1)                  | (1)                  |                                           |                                                                                                                                                                                                       |
| Monochlorobenzene (MCB)    | -> see: Chlorobenzene                                        |             |               |             |           |                      |      |     |     |      |      |     |     |     |     |          |           |     |              |                    |      |      |                |           |     |              |     |                      |                      |                                           |                                                                                                                                                                                                       |
| Monochloroethane           | C <sub>2</sub> H <sub>5</sub> Cl                             | 000075-00-3 |               | F+, Xn      | X         | 3/3                  | 3/4  | 1/0 | 4/4 | 0/0  | 3/4  | 1/0 | 3/4 | 4/4 | 4/4 | 4/4      | 4/4       | 4/4 | 1/1          | 1/1                | 1/0  | 1/1  | 4/4            | 3/0       | 4/4 | 0/0          | (3) | (1/1L) <sup>1)</sup> | (1/1L) <sup>1)</sup> | 0/0                                       | Ethyl chloride; Chloroethane, 1-<br><sup>1)</sup> Water-free! If even traces of hydrochloric acid (HCl) are split off by moisture, there is a risk of pitting, crevice and stress corrosion cracking. |
| Morpholine                 | C <sub>4</sub> H <sub>9</sub> NO                             | 000110-91-8 | techn. pure   | C, Xn       | X         | 1/1                  | 1/1  | (3) | (3) | 0/0  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 4/4      | 4/4       | 0/0 | 0/0          | (1)                | 1/1  | 1/3  | 3/0            | 2/3       | 4/4 | 0/0          | 1/0 | (1)                  | (1)                  | 0/0                                       |                                                                                                                                                                                                       |
| Motor oil                  | —                                                            | —           |               | ?           |           | 0/0                  | 0/0  | 1/0 | (2) | (1)  | 0/0  | 1/1 | 1/3 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (1)  | 1/1  | 4/4            | 1/0       | 1/0 | 0/0          | 1/1 | 1/1                  | 1/1                  |                                           |                                                                                                                                                                                                       |
| Mowilith D                 | —                                                            | —           |               | ?           |           | 1/0                  | 0/0  | (2) | 0/0 | (2)  | 0/0  | (2) | 1/0 | 0/0 | 0/0 | 1/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/0  | (2)            | (2)       | 0/0 | (2)          | (1) | (1)                  | 0/0                  | dispersion of polyvinyl acetate; Clariant |                                                                                                                                                                                                       |
| Muscat                     | —                                                            | —           | ground        | ?           |           | 0/0                  | 0/0  | (2) | 4/4 | (2)  | 0/0  | (2) | (2) | 4/4 | 0/0 | 0/0      | 0/0       | 3/3 | 0/0          | (1)                | (1)  | (2)  | (2)            | (2)       | (2) | 0/0          | (1) | (1)                  | (1)                  |                                           |                                                                                                                                                                                                       |
| Mustard                    | —                                                            | —           |               |             |           | 0/0                  | 0/0  | (2) | 1/0 | (1)  | 0/0  | 1/0 | 1/1 | 1/1 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | 1/1                | (1)  | (1)  | (2)            | 1/0       | 1/0 | 0/0          | (2) | 1/0L                 |                      |                                           |                                                                                                                                                                                                       |



| CHEMICALS                   | FORMULA                                                       | CAS-NR.     | CONCENTRATION        | HAZARD NOTE | thermoplastics |      |      |     |     |      |     |     |     |     | fluoroplastics |          |           | elastomers |              |     | metals |      |      |           | Hastelloy C | COMMENT |      |      |      |     |                                    |
|-----------------------------|---------------------------------------------------------------|-------------|----------------------|-------------|----------------|------|------|-----|-----|------|-----|-----|-----|-----|----------------|----------|-----------|------------|--------------|-----|--------|------|------|-----------|-------------|---------|------|------|------|-----|------------------------------------|
|                             |                                                               |             |                      |             | FLAMMABLE      | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU            | PVC HART | PVC WEICH | SAN        | ECTFE / ETFE | FEP | PTFE   | PVDF | EPDM | FPM / FKM |             |         | NBR  | SI   | AL   | V2A | V4A                                |
| Neon                        | Ne                                                            | 007440-01-9 | —                    | —           |                | 0/0  | 0/0  | 1/0 | (1) | 1/1  | 0/0 | 1/1 | (1) | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 1/1          | (1) | 1/1    | 1/1  | 1/1  | 1/0       | 0/0         | 1/1     | 1/1  | 1/1  |      |     |                                    |
| Nickel acetate              | C <sub>4</sub> H <sub>8</sub> NiO <sub>4</sub>                | 000373-02-4 | aqueous              | (T, N)      |                | 1/1  | 1/1  | (3) | (2) | (1)  | 0/0 | (2) | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 1/1          | 1/1 | (1)    | 1/0  | (3)  | 3/0       | 0/0         | 4/4     | 0/0  | 0/0  |      |     |                                    |
| Nickel dichloride           | NiCl <sub>2</sub>                                             | 007718-54-9 | saturated            | T           |                | 1/1  | 1/1  | 1/0 | (2) | (1)  | 0/0 | 2/0 | 1/1 | 0/0 | 0/0            | 1/1      | 1/1       | 0/0        | 0/0          | 1/1 | 1/1    | 1/1  | 1/0  | 1/0       | 1/0         | 0/0     | 4/4  | 2/0L | 2/0L | 1/1 |                                    |
| Nickel dichloride           | NiCl <sub>2</sub>                                             | 007718-54-9 | aqueous              | T           |                | 1/1  | 1/1  | (3) | (2) | (1)  | 0/0 | 2/0 | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 1/1          | 1/1 | 1/1    | 1/0  | 1/0  | 1/0       | 0/0         | 4/4     | 2/0L | 2/0L | 1/1  |     |                                    |
| Nickel sulfate              | NiSO <sub>4</sub>                                             | 007786-81-4 | saturated            | Xn          |                | 1/1  | 1/1  | 1/0 | 1/0 | (1)  | 1/0 | 2/0 | 1/1 | 1/1 | 0/0            | 1/1      | 1/3       | 1/1        | 0/0          | 1/1 | 1/1    | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 4/4  | 1/1  | 1/1  | 1/1 |                                    |
| Nickel sulfate              | NiSO <sub>4</sub>                                             | 007786-81-4 | aqueous              | Xn          |                | 1/1  | 1/1  | (3) | 1/0 | (1)  | 0/0 | 2/0 | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | 1/1 | 1/1    | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 4/4  | 1/1  | 1/1  | 1/1 |                                    |
| Nickelous nitrate           | Ni(NO <sub>3</sub> ) <sub>2</sub>                             | 013138-45-9 | saturated            | (O, Xn)     |                | 1/1  | 1/1  | (3) | (2) | (1)  | 1/0 | (2) | 1/1 | 1/0 | 1/0            | 1/1      | 1/1       | 0/0        | 0/0          | 1/1 | 1/1    | 1/1  | 1/0  | 1/0       | 1/0         | 0/0     | 4/4  | 1/0  | 1/0  | 1/1 |                                    |
| Nicotine                    | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub>                | 000054-11-5 | —                    | T+          |                | 1/0  | 1/0  | (3) | (3) | 0/0  | 0/0 | (2) | 1/0 | 1/0 | 0/0            | 1/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (2)  | 1/0  | 1/0       | 1/1         | 0/0     | (1)  | (1)  | (1)  | 0/0 |                                    |
| Nicotinic acid              | C <sub>6</sub> H <sub>5</sub> NO <sub>2</sub>                 | 000059-67-6 | diluted              | Xi          |                | 1/1  | 1/1  | (3) | (2) | 0/0  | 0/0 | (3) | 1/0 | 0/0 | 0/0            | 1/1      | 0/0       | 0/0        | 0/0          | 1/1 | (1)    | (2)  | (2)  | (3)       | (2)         | 0/0     | (3)  | 0/0  | 0/0  | 0/0 |                                    |
| Nitric acid                 | HNO <sub>3</sub>                                              | 007697-37-2 | 1-10 %               | C           |                | 1/1  | 1/1  | 4/4 | 1/2 | (2)  | 1/1 | 4/4 | 1/1 | 2/4 | 1/3            | 1/2      | 0/0       | 1/3        | 1/1          | 1/1 | 1/1    | 1/1  | 2/0  | 1/1       | 4/4         | 0/0     | 3/4  | 1/1  | 1/1  | 1/1 |                                    |
| Nitric acid                 | HNO <sub>3</sub>                                              | 007697-37-2 | 50 %                 | C+          |                | 2/4  | 3/4  | 4/4 | 4/4 | (2)  | 2/4 | 4/4 | 3/4 | 4/4 | 2/3            | 2/3      | 0/0       | 0/3        | 1/1          | 1/1 | 1/1    | 1/1  | 4/4  | 1/0       | 4/4         | 0/0     | 4/4  | 1/2  | 1/2  | 1/2 |                                    |
| Nitric acid                 | HNO <sub>3</sub>                                              | 007697-37-2 | 66 %                 | C+          |                | 2/4  | 3/4  | 4/4 | 4/4 | (4)  | 2/3 | 4/4 | 4/4 | 4/4 | 4/4            | 3/4      | 0/0       | 0/0        | 1/1          | 1/1 | 1/1    | 1/1  | 4/4  | 1/0       | 4/4         | 0/0     | 4/4  | 1/2  | 1/2  | 1/2 |                                    |
| Nitric acid                 | HNO <sub>3</sub>                                              | 007697-37-2 | 100 %                | O, C+       |                | 4/4  | 4/4  | 4/4 | 4/4 | (4)  | 0/0 | 4/4 | 4/4 | 0/0 | 0/0            | 4/4      | 0/0       | 4/4        | 0/0          | 0/0 | 1/1    | 4/4  | 4/4  | 4/4       | 4/4         | 0/0     | 1/1  | 2/3  | 3/3  | ?   |                                    |
| Nitric acid                 | HNO <sub>3</sub>                                              | 007697-37-2 | 70 %                 | O, C+       |                | 2/4  | 3/4  | 4/4 | 4/4 | (4)  | 2/3 | 4/4 | 4/4 | 4/4 | 4/4            | 3/4      | 0/0       | 0/0        | 1/1          | 1/1 | 1/1    | 1/1  | 4/4  | 2/3       | 4/4         | 0/0     | 4/4  | 1/2  | 1/2  | 1/2 |                                    |
| Nitric acid                 | -> see: Ammonium nitrate                                      |             |                      |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |      |      |      |     |                                    |
| Nitric acid, magnesium salt | -> see: Magnesium nitrate                                     |             |                      |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |      |      |      |     |                                    |
| Nitric acid, potassium salt | -> see: Potassium nitrate                                     |             |                      |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |      |      |      |     |                                    |
| Nitro benzoic acid          | C <sub>7</sub> H <sub>5</sub> NO <sub>4</sub>                 | —           | —                    | (Xn)        |                | 1/0  | 1/0  | (3) | (3) | 0/0  | 0/0 | (3) | 1/0 | 0/0 | 0/0            | 1/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (2)  | 3/0  | (3)       | (2)         | 0/0     | (3)  | 0/0  | 0/0  |     | isomer not indicated in the source |
| Nitro reducer               | —                                                             | —           | —                    | ?           | X              | 0/0  | 0/0  | 3/0 | (4) | 0/0  | (4) | (3) | (3) | 4/4 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (3)  | (3)  | (4)       | 4/4         | 0/0     | (1)  | (1)  | (1)  |     | solvent cleaner mixture            |
| Nitrobenzene                | C <sub>6</sub> H <sub>5</sub> NO <sub>2</sub>                 | 000098-95-3 | —                    | T           |                | 3/4  | 4/4  | 4/4 | 4/4 | 1/0  | 4/4 | 3/0 | 2/4 | 4/4 | 4/4            | 4/4      | 4/4       | 1/2        | 1/1          | 1/1 | 1/1    | 1/1  | 4/4  | 4/4       | 4/4         | 0/0     | (1)  | 1/1  | 1/1  | 1/1 |                                    |
| Nitroethane                 | C <sub>2</sub> H <sub>5</sub> NO <sub>2</sub>                 | 000079-24-3 | —                    | Xn          | X              | 0/0  | 0/0  | (3) | (4) | 0/0  | 0/0 | (3) | (2) | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (3)  | 3/0  | 4/4       | 4/4         | 0/0     | (1)  | (1)  | (1)  |     |                                    |
| Nitrogen                    | N <sub>2</sub>                                                | 007727-37-9 | —                    | —           |                | 0/0  | 0/0  | 1/0 | 1/1 | 1/1  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 1/1          | 1/1 | 1/1    | 1/1  | 1/1  | 1/0       | 0/0         | 1/1     | 1/1  | 1/1  |      |     |                                    |
| Nitrogen hydride            | -> see: Hydrazine                                             |             |                      |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |      |      |      |     |                                    |
| Nitrogen tetroxide          | N <sub>2</sub> O <sub>4</sub>                                 | 010544-72-6 | —                    | (O), T+, C  |                | 0/0  | 0/0  | 3/0 | (3) | 1/0  | 0/0 | 4/4 | 1/0 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | 0/0 | (1)    | (2)  | 4/4  | 4/4       | 4/4         | 0/0     | (2)  | (1)  | (1)  |     |                                    |
| Nitroglycerine              | C <sub>3</sub> H <sub>5</sub> (NO <sub>3</sub> ) <sub>3</sub> | 000055-63-0 | diluted              | (E, T+)     |                | 0/0  | 0/0  | (3) | (3) | 0/0  | 0/0 | (2) | (2) | 0/0 | 0/0            | 3/0      | 4/4       | 0/0        | 0/0          | (1) | 1/0    | (3)  | 1/0  | 1/0       | 4/4         | 0/0     | 0/0  | 0/0  | 0/0  | 0/0 |                                    |
| Nitrohydrochloric acid      | HNO <sub>3</sub> + HCl                                        | 008007-56-5 | —                    | C           |                | 4/4  | 4/4  | 4/4 | 4/4 | 4/4  | 3/3 | 4/4 | 4/4 | 4/4 | 4/4            | 4/4      | 4/4       | 3/4        | 1/1          | (2) | 1/1    | 3/0  | 4/4  | 4/4       | 4/4         | 0/0     | 4/4  | 4/4  | 4/4  |     |                                    |
| Nitropropane                | C <sub>3</sub> H <sub>7</sub> NO <sub>2</sub>                 | —           | —                    | (T)         |                | 0/0  | 0/0  | (3) | (4) | 0/0  | 0/0 | (3) | (2) | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (3)  | 3/0  | 4/4       | 4/4         | 0/0     | (1)  | (1)  | (1)  |     |                                    |
| Nitrose gases               | —                                                             | —           | diluted              | T           |                | 1/1  | 0/0  | 3/0 | 4/4 | 0/0  | 0/0 | 4/4 | 1/4 | 0/0 | 0/0            | 1/3      | 0/0       | 0/0        | 0/0          | (1) | 1/1    | 1/1  | 3/0  | 3/0       | 4/4         | 0/0     | (2)  | (1)  | (1)  | 0/0 |                                    |
| Nitrotoluene                | C <sub>7</sub> H <sub>7</sub> NO <sub>2</sub>                 | 001321-12-6 | techn. pure          | T           |                | 1/3  | 1/3  | 4/4 | 4/4 | 1/0  | (4) | 3/0 | 1/3 | 4/4 | 0/0            | 4/4      | 4/4       | 0/0        | 0/0          | (1) | 1/1    | 1/1  | 4/4  | 4/4       | 4/4         | 0/0     | (1)  | 1/1  | 1/1  | 1/1 |                                    |
| Nitrous acid, sodium salt   | -> see: Sodium nitrite                                        |             |                      |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |      |      |      |     |                                    |
| Nitrous oxide               | N <sub>2</sub> O                                              | 010024-97-2 | —                    | (O)         |                | 0/0  | 0/0  | (2) | (2) | (1)  | 0/0 | (2) | (2) | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (1)  | 2/0  | 1/0       | 1/0         | 0/0     | 1/1  | (1)  | (1)  |     |                                    |
| Nonanol                     | -> see: Nonyl alcohol                                         |             |                      |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |      |      |      |     |                                    |
| Nonyl alcohol               | C <sub>9</sub> H <sub>20</sub> O                              | 000143-08-8 | 100 %                | Xn, Xi      |                | 0/0  | 1/1  | (2) | (2) | (1)  | 0/0 | (1) | 1/1 | 1/0 | 0/0            | 0/0      | 0/0       | 1/1        | 0/0          | (1) | (1)    | (1)  | 1/0  | 1/0       | 3/3         | 0/0     | (1)  | (1)  | (1)  |     |                                    |
| Nutmeg oil                  | —                                                             | 008008-45-5 | —                    | (Xn)        |                | 0/0  | 0/0  | (2) | 4/4 | 0/0  | 0/0 | (2) | (2) | 4/4 | 0/0            | 0/0      | 0/0       | 3/4        | 0/0          | (1) | (1)    | (2)  | (4)  | (3)       | (3)         | 0/0     | (1)  | (1)  | (1)  |     |                                    |
| Octafluoropropane           | C <sub>3</sub> F <sub>8</sub>                                 | 000076-19-7 | —                    | ?           |                | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | 1/0 | (3) | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | 0/0 | (1)    | 0/0  | 1/0  | 1/0       | 1/0         | 0/0     | (3)  | 0/0  | 0/0  |     |                                    |
| Octane                      | C <sub>8</sub> H <sub>18</sub>                                | 000111-65-9 | —                    | F, Xn       | X              | 1/1  | 1/1  | 1/0 | 2/3 | (1)  | 1/1 | 1/0 | 1/1 | 4/4 | 2/3            | 3/4      | 3/3       | 1/1        | 1/1          | 1/1 | (1)    | (1)  | 4/4  | 1/0       | 3/3         | 0/0     | 1/1  | 1/1  | 1/1  | 0/0 |                                    |
| Octyl carbinol              | -> see: Nonyl alcohol                                         |             |                      |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |      |      |      |     |                                    |
| Octyl cresol ?              | C <sub>15</sub> H <sub>24</sub> O                             | —           | 100 %                | ?           |                | 3/0  | 3/0  | (3) | (4) | 0/0  | 0/0 | (3) | 3/0 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (2)  | 4/4  | 3/0       | 3/0         | 0/0     | (1)  | (1)  | (1)  | 0/0 |                                    |
| Oils and fats, vegetable    | —                                                             | —           | —                    | —           |                | 1/3  | 1/3  | (2) | (2) | 1/0  | 0/0 | (2) | 1/3 | 3/0 | 0/0            | 1/1      | 3/3       | 0/0        | 0/0          | (1) | 1/1    | 1/1  | 4/4  | 1/1       | (2)         | 0/0     | (1)  | 1/1  | 1/1  | 0/0 |                                    |
| Oils, essential             | —                                                             | —           | —                    | ?           |                | 4/4  | 3/4  | (2) | (3) | 0/0  | 0/0 | (2) | 3/4 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (3)  | 4/4  | (1-3)     | (3)         | 0/0     | 1/1  | (1)  | (1)  | 0/0 |                                    |
| Oleic acid                  | C <sub>18</sub> H <sub>34</sub> O <sub>2</sub>                | 000112-80-1 | techn. pure          | Xi          |                | 1/3  | 1/3  | 1/0 | 1/0 | 1/0  | 0/0 | 2/0 | 1/3 | 1/3 | 0/0            | 1/1      | 0/0       | 1/3        | 0/0          | (1) | 1/1    | 1/1  | 4/4  | 2/2       | 3/0         | 0/0     | 1/1  | 1/1  | 1/1  | 0/0 |                                    |
| Oleic acid methyl ester     | C <sub>19</sub> H <sub>36</sub> O <sub>2</sub>                | 000112-62-9 | —                    | —           |                | 0/0  | 0/0  | (2) | (3) | (2)  | (4) | (2) | (2) | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (1)  | 3/0  | 1/0       | 4/4         | 0/0     | (1)  | (1)  | (1)  |     |                                    |
| Oleum                       | H <sub>2</sub> SO <sub>4</sub> x SO <sub>3</sub>              | 008014-95-7 | 10 % SO <sub>3</sub> | C+          |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |      |      |      |     |                                    |

| CHEMICALS                         | FORMULA                                            | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics |      |      |     |     |      |     |     |     |     | fluoroplastics |          |           | elastomers |              |     | metals |      |      |           | Hastelloy C | COMMENT |     |      |      |     |     |                                                          |
|-----------------------------------|----------------------------------------------------|-------------|---------------|-------------|----------------|------|------|-----|-----|------|-----|-----|-----|-----|----------------|----------|-----------|------------|--------------|-----|--------|------|------|-----------|-------------|---------|-----|------|------|-----|-----|----------------------------------------------------------|
|                                   |                                                    |             |               |             | FLAMMABLE      | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU            | PVC HART | PVC WEICH | SAN        | ECTFE / ETFE | FEP | PTFE   | PVDF | EPDM | FPM / FKM |             |         | NBR | SI   | AL   | V2A | V4A |                                                          |
| Paraffins                         | C <sub>n</sub> H <sub>2n+2</sub>                   | —           | 100 %         | ?           |                | 1/0  | 1/1  | 1/0 | 1/0 | 1/0  | 1/0 | 1/1 | 1/1 | 1/0 | 1/0            | 1/0      | 1/0       | 0/0        | 0/0          | (1) | 1/1    | (1)  | 4/4  | 1/0       | 1/3         | 0/0     | 1/1 | 1/1  | 1/1  |     |     |                                                          |
| Paraformaldehyde                  | (CH <sub>2</sub> O) <sub>n</sub> ·H <sub>2</sub> O | 030525-89-4 |               | F, T        | X              | 0/0  | 0/0  | 0/0 | (2) | 1/0  | 0/0 | (2) | 1/0 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (2)  | 3/0  | 1/0       | 3/3         | 0/0     | (1) | (1)  | (1)  |     |     | Polyoxymethylene;                                        |
| Peanut oil                        | —                                                  | 008002-03-7 |               | —           |                | 0/0  | 0/0  | 0/0 | (2) | 1/0  | 0/0 | (2) | 1/1 | 1/1 | 0/0            | 0/0      | 0/0       | 1/1        | 0/0          | (1) | 1/1    | (1)  | 4/4  | 1/0       | 1/0         | 0/0     | (1) | (1)  | (1)  | 0/0 |     |                                                          |
| Pectin                            | —                                                  | 009000-69-5 | aqueous       | —           |                | 1/1  | 1/1  | 1/1 | 1/1 | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1            | 1/1      | 1/1       | 1/1        | 1/1          | 1/1 | 1/1    | 1/1  | 1/1  | 1/1       | 1/1         | 1/1     | 1/1 | 1/1  |      |     |     |                                                          |
| Pectin                            | —                                                  | 009000-69-5 |               | —           |                | 1/1  | 1/1  | 1/1 | 1/1 | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1            | 1/1      | 1/1       | 1/1        | 1/1          | 1/1 | 1/1    | 1/1  | 1/1  | 1/1       | 1/1         | 1/1     | 1/1 | 1/1  |      |     |     |                                                          |
| Pelargonic alcohol                | -> see: Nonyl alcohol                              | —           |               |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |     |      |      |     |     |                                                          |
| Penicillin                        | —                                                  | —           |               | Xn          |                | (1)  | (1)  | (2) | (1) | (1)  | 0/0 | (1) | (2) | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 1/1          | (1) | 1/1    | (1)  | (1)  | (2)       | (1)         | (2)     | 0/0 | (1)  | (1)  | (1) |     | antibiotic                                               |
| Pentachlorobiphenyl               | C <sub>12</sub> H <sub>5</sub> Cl <sub>5</sub>     | —           |               | Xn          |                | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | (2) | 4/4 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | 0/0 | (1)    | (2)  | 4/4  | 3/0       | 4/4         | 0/0     | (1) | 0/0  | 0/0  |     |     |                                                          |
| Pentamethyleneimine               | -> see: Piperidine                                 | —           |               |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |     |      |      |     |     |                                                          |
| Pentane, normal                   | C <sub>5</sub> H <sub>12</sub>                     | 000109-66-0 |               | F           | X              | 1/3  | 1/3  | 1/0 | 1/0 | 1/1  | (3) | 1/0 | (3) | 3/0 | 0/0            | 0/0      | 0/0       | 1/0        | 0/0          | (1) | (1)    | (1)  | 4/4  | 1/0       | 1/2         | 0/0     | 1/1 | 1/1  | 1/1  |     |     |                                                          |
| Pentanethiol, 1-                  | C <sub>5</sub> H <sub>12</sub> S                   | 000110-66-7 |               | Xn          | X              | 0/0  | 0/0  | (2) | (3) | 0/0  | (4) | (2) | (2) | 0/0 | 0/0            | 0/0      | 0/0       | 4/4        | 0/0          | (1) | (1)    | (2)  | 4/4  | (3)       | (4)         | 0/0     | (2) | (1)  | (1)  |     |     |                                                          |
| Pentanol, 1-                      | C <sub>5</sub> H <sub>12</sub> O                   | 000071-41-0 |               | Xn          | X              | 1/1  | 1/2  | 1/0 | 1/0 | 1/0  | 2/3 | 1/0 | 1/1 | 1/3 | 3/0            | 2/3      | 3/0       | 0/4        | 1/1          | 1/1 | 1/1    | 1/1  | 3/0  | 2/4       | 3/0         | 0/0     | 1/2 | 1/1  | 1/1  | 0/0 |     | Amyl alcohol, n-; Butyl carbinol, n-; Pentyl alcohol, n- |
| Pentanone, 3-                     | C <sub>5</sub> H <sub>10</sub> O                   | 000096-22-0 |               | F           |                | 2/2  | 2/3  | (3) | 4/4 | (4)  | 2/3 | 1/0 | 2/2 | 4/4 | 4/4            | 4/4      | 0/0       | 4/4        | 2/3          | 1/1 | 1/1    | (3)  | (3)  | (4)       | (4)         | 0/0     | (1) | (1)  | (1)  | 0/0 |     | Diethyl ketone; Dimethylacetone; Methacetone             |
| Pentyl alcohol, n-                | -> see: Pentanol, 1-                               | —           |               |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |     |      |      |     |     |                                                          |
| Pepper                            | —                                                  | —           | ground        | ?           |                | 0/0  | 0/0  | (2) | 1/0 | (1)  | 0/0 | (2) | (2) | 4/4 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (1)  | (1)  | (2)       | (2)         | (2)     | 0/0 | (1)  | (1)  | (1) |     |                                                          |
| Perchloric acid                   | HClO <sub>4</sub>                                  | 007601-90-3 | 70 %          | E, O, C+    |                | 2/4  | 3/4  | 4/4 | 4/4 | (4)  | 2/4 | 4/4 | 4/4 | 2/3 | 4/4            | 3/4      | 4/4       | 0/0        | 1/2          | 1/1 | 1/1    | 1/1  | 3/0  | 1/1       | 4/4         | 0/0     | 4/4 | 0/0  | 0/0  | ?   |     |                                                          |
| Perchloric acid                   | HClO <sub>4</sub>                                  | 007601-90-3 | 20 %          | Xi          |                | 0/0  | 1/3  | 4/4 | 3/0 | 0/0  | 0/0 | 4/4 | 1/3 | 0/0 | 0/0            | 1/3      | 3/0       | 0/0        | 0/0          | 1/1 | 1/1    | 1/1  | 2/0  | 1/1       | 4/4         | 0/0     | 4/4 | 0/0  | 0/0  | 1/1 |     |                                                          |
| Perchlorobutadiene                | C <sub>4</sub> Cl <sub>6</sub>                     | 000087-68-3 |               | T           |                | 0/0  | 0/0  | (3) | 4/4 | 0/0  | (4) | 1/0 | (3) | 4/4 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (2)    | (3)  | 4/4  | 1/0       | 4/4         | 0/0     | (3) | 0/0  | 0/0  |     |     |                                                          |
| Perchloroethylene                 | -> see: Tetrachloroethylene                        | —           |               |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |     |      |      |     |     |                                                          |
| Perfluorocyclobutane              | C <sub>4</sub> F <sub>8</sub>                      | 000115-25-3 |               | ?           |                | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | 1/0 | (3) | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | 0/0 | (1)    | 0/0  | 1/0  | 3/0       | 1/0         | 0/0     | (3) | 0/0  | 0/0  |     |     |                                                          |
| Perfumes                          | —                                                  | —           |               | ?           |                | 3/0  | 3/0  | 1/0 | (3) | 1/0  | 0/0 | (2) | 1/0 | 4/4 | 0/0            | 1/0      | 3/0       | 0/0        | 0/0          | (1) | (1)    | (1)  | (3)  | (2)       | (3)         | 0/0     | (1) | (1)  | (1)  |     |     |                                                          |
| Perrnanganic acid, potassium salt | -> see: Potassium permanganate                     | —           |               |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |     |      |      |     |     |                                                          |
| Petroleum                         | —                                                  | 008002-05-9 |               | (Xn)        |                | 0/0  | 0/0  | 1/0 | (3) | 1/0  | 0/0 | 1/0 | 1/0 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | 1/0    | 1/1  | 4/4  | 1/0       | 3/3         | 0/0     | (1) | (1)  | (1)  | 0/0 |     |                                                          |
| Petroleum ether                   | —                                                  | 008032-32-4 | techn. pure   | (F, Xn)     | X              | 1/3  | 1/3  | 1/0 | 3/0 | 1/0  | 1/0 | 1/1 | 1/3 | 4/4 | 1/0            | 1/1      | 3/3       | 3/3        | 0/0          | (1) | 1/1    | 1/1  | 4/4  | 1/0       | 1/3         | 0/0     | 1/1 | 1/1  | 1/1  | 1/1 |     |                                                          |
| Phenacetin                        | C <sub>10</sub> H <sub>13</sub> NO <sub>2</sub>    | 000062-44-2 |               | Xn          |                | 0/0  | 0/0  | 0/0 | 0/0 | 0/0  | 0/0 | (2) | (2) | 0/0 | 0/0            | 0/0      | 0/0       | 1/1        | 0/0          | (1) | (1)    | (1)  | (2)  | (2)       | (2)         | 0/0     | (2) | (1)  | (1)  |     |     |                                                          |
| Phenethyl alcohol                 | C <sub>8</sub> H <sub>10</sub> O                   | 000060-12-8 |               | Xn          |                | 0/0  | 0/0  | 3/0 | 4/4 | 0/0  | 0/0 | (2) | 1/0 | 0/0 | 0/0            | 0/0      | 0/0       | 4/4        | 0/0          | (1) | (1)    | (2)  | (3)  | (2)       | 4/4         | 0/0     | (1) | (1)  | (1)  |     |     |                                                          |
| Phenetole                         | -> see: Ethoxybenzene                              | —           |               |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |     |      |      |     |     |                                                          |
| Phenol                            | C <sub>6</sub> H <sub>6</sub> O                    | 000108-95-2 | 10 %          | T           |                | 1/1  | 1/1  | 4/4 | 4/4 | 4/4  | 1/0 | 4/4 | 1/1 | 4/4 | 4/4            | 1/3      | 3/3       | 3/3        | 0/0          | 1/0 | 1/1    | 1/1  | 4/4  | 2/3       | 4/4         | 0/0     | 1/1 | 1/2  | 1/1  | 0/0 |     |                                                          |
| Phenol                            | C <sub>6</sub> H <sub>6</sub> O                    | 000108-95-2 | 100 %         | T, C        |                | 2/3  | 3/3  | 4/4 | 4/4 | 4/4  | 1/1 | 4/4 | 1/2 | 4/4 | 3/3            | 4/4      | 3/0       | 4/4        | 1/1          | 1/1 | 1/1    | 1/1  | 4/4  | 3/0       | 4/4         | 0/0     | 1/1 | 1/2  | 1/1  | 0/0 |     |                                                          |
| Phenolic resin mass               | —                                                  | —           |               | ?           |                | 1/1  | 1/1  | (3) | (3) | 0/0  | 0/0 | (3) | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | (1)  | (4)  | (3)       | (3)         | 0/0     | (2) | (1)  | (1)  | 0/0 |     |                                                          |
| Phenyl chloride                   | -> see: Chlorobenzene                              | —           |               |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |     |      |      |     |     |                                                          |
| Phenyl methyl ketone              | -> see: Acetophenone                               | —           |               |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |     |      |      |     |     |                                                          |
| Phenylethanone, 1-                | -> see: Acetophenone                               | —           |               |             |                |      |      |     |     |      |     |     |     |     |                |          |           |            |              |     |        |      |      |           |             |         |     |      |      |     |     |                                                          |
| Phenyldiazine                     | C <sub>6</sub> H <sub>8</sub> N <sub>2</sub>       | 000100-63-0 | techn. pure   | T           |                | 3/0  | 0/0  | (3) | (3) | 0/0  | 0/0 | (2) | 3/4 | 0/0 | 0/0            | 4/4      | 0/0       | 0/0        | 0/0          | (1) | 1/1    | 1/1  | 4/4  | 1/3       | 4/4         | 0/0     | (2) | 0/0  | 0/0  | 0/0 |     |                                                          |
| Phenyldiazine hydrochloride       | C <sub>6</sub> H <sub>8</sub> N <sub>2</sub> ·HCl  | 000059-88-1 |               | T           |                | 0/0  | 0/0  | (3) | (2) | 0/0  | 0/0 | (3) | 1/3 | 0/0 | 0/0            | 3/0      | 0/0       | 0/0        | 0/0          | (1) | 1/1    | 1/1  | (3)  | 1/3       | 1/3         | 0/0     | (4) | (4L) | (4L) |     |     |                                                          |
| Phenylsulfonate                   | —                                                  | 070528-83-5 |               | ?           |                | 0/0  | 1/1  | 0/0 | 0/0 | 0/0  | 0/0 | 0/0 | 1/1 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | (1)    | 0/0  | 0/0  | 0/0       | 0/0         | 0/0     | 0/0 | 0/0  | 0/0  | 0/0 |     |                                                          |
| Phosgene                          | COCl <sub>2</sub>                                  | 000075-44-5 | liquid        | T+, C       |                | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | (2) | 0/0 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | (1) | 1/1    | (3)  | (3)  | 1/0       | 3/0         | 0/0     | (3) | 3/4  | 3/4  | 0/0 | 0/0 | Carbonyl chloride; Chloroformyl chloride                 |
| Phosgene                          | COCl <sub>2</sub>                                  | 000075-44-5 | gaseous       | T+, C       |                | 0/0  | 3/0  | 1/0 | (3) | 0/0  | 0/0 | (2) | 3/4 | 0/0 | 0/0            | 4/4      | 0/0       | 0/0        | 0/0          | (1) | 1/1    | (3)  | (3)  | (3)       | 3/0         | 0/0     | (3) | 3/4  | 3/4  | 0/0 |     |                                                          |
| Phosphates                        | —                                                  | —           | aqueous       | ?           |                | 1/1  | 1/1  | 0/0 | 0/0 | (1)  | 0/0 | (2) | 3/4 | 0/0 | 0/0            | 0/0      | 0/0       | 0/0        | 0/0          | 1/1 | 1/1    | (1)  | (1)  | (1)       | (2)         | 0/0     | 0/0 | (1)  | (1)  |     |     | salts of phosphoric acid                                 |
| Phosphine                         | PH <sub>3</sub>                                    | 007803-51-2 | concentrated  | F+, T+      | X              | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | 1/0 | (3) | 0/0 | 0/0            | 1/0      | 0/0       | 0/0        | 0/0          | 0/0 | 1/0    | 1/1  | 1/0  | 1/0       | 4/4         | 0/0     | (1) | 0/0  | 0/0  | 0/0 |     |                                                          |
| Phosphoric acid                   | H <sub>3</sub> PO <sub>4</sub>                     | 007664-38-2 | 30 %          | C           |                | 1/1  | 1/1  | 4/4 | 1/0 | 0/0  | 0/0 | 4/4 | 1/1 | 1/1 | 0/0            | 0/0      | 0/0       | 1/1        | 0/0          | 1/1 | 1/1    | 1/1  | 1/0  | 1/1       | 3/3         | 0/0     | 4/4 | 1/3  | 1/2  | 1/1 |     |                                                          |

| CHEMICALS                    | FORMULA                                                            | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics ----- |      |      |     |     |      |     |     |     |     |     |          |           | fluoroplastics --- |              |     | elastomers --- |      |       | metals ----- |     |     |      | COMMENT |      |     |                                                  |  |
|------------------------------|--------------------------------------------------------------------|-------------|---------------|-------------|----------------------|------|------|-----|-----|------|-----|-----|-----|-----|-----|----------|-----------|--------------------|--------------|-----|----------------|------|-------|--------------|-----|-----|------|---------|------|-----|--------------------------------------------------|--|
|                              |                                                                    |             |               |             | FLAMMABLE            | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN                | ECTFE / ETFE | FEP | PTFE           | PVDF | EPDM  | FPM / FKM    | NBR | SI  | AL   |         | V2A  | V4A | Hastelloy C                                      |  |
| Polyethylene glycol          | HO-(C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> -H               | 025322-68-3 | 100 %         | (I)         |                      | 1/1  | 1/1  | (3) | 0/0 | 0/0  | 0/0 | 1/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | 0/0          | (1) | (1)            | (2)  | (2-3) | (2)          | (3) | 0/0 | (1)  | (1)     | 0/0  |     |                                                  |  |
| Polyoxymethylene             | -> see: Paraformaldehyde                                           |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |                    |              |     |                |      |       |              |     |     |      |         |      |     |                                                  |  |
| Polyran M25 N                | —                                                                  | —           | 80°C          | ?           |                      | 0    | 0    | 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0   | 0        | 0         | 0                  | 0            | 0/0 | 0              | 0    | 0/0   | 0            | 3   | 0   | 0    | (1)     | (1)  |     | lubricating oil                                  |  |
| Polyran M400                 | —                                                                  | —           | 80°C          | ?           |                      | 0    | 0    | 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0   | 0        | 0         | 0                  | 0            | 0/0 | 0              | 0    | 0/0   | 0            | (3) | 0   | 0    | (1)     | (1)  |     | lubricating oil                                  |  |
| Polysolvan O                 | C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>                      | 007397-62-8 | 100 %         | Xi          |                      | 0/0  | 1/1  | (2) | (3) | 1/0  | 0/0 | 1/0 | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | (1)          | (1) | 0/0            | 0/0  | 0/0   | (3)          | 0/0 | (1) | (1)  | (1)     |      |     | solvent cleaner, butyl glycolate; Celanese AG    |  |
| Potassium acetate            | C <sub>2</sub> H <sub>3</sub> KO <sub>2</sub>                      | 000127-08-2 | aqueous       | Xi          |                      | 1/1  | 1/1  | 1/0 | (1) | (2)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 1/0      | 1/0       | 0/0                | 1/1          | 1/1 | 1/0            | 1/1  | 3/0   | 3/3          | 0/0 | 1/3 | 1/1  | 1/1     | 0/0  |     |                                                  |  |
| Potassium bisulfate          | KHSO <sub>4</sub>                                                  | 007646-93-7 | aqueous       | (C)         |                      | 1/1  | 1/1  | 4/4 | 1/0 | (2)  | 0/0 | 2/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | 1/1          | 1/1 | 1/1            | 1/0  | 1/0   | 1/1          | 0/0 | 1/0 | 4/4  | 4/4     | 1/1  |     |                                                  |  |
| Potassium bisulfate          | KHSO <sub>4</sub>                                                  | 007646-93-7 |               | C           |                      | 1/1  | 1/1  | 4/4 | 1/0 | 0/0  | 0/0 | 2/0 | 1/1 | 1/1 | 0/0 | 0/0      | 0/0       | 1/1                | 1/1          | 1/1 | 1/1            | 1/0  | 1/0   | 1/1          | 0/0 | 1/0 | 4/4  | 4/4     | ?    |     |                                                  |  |
| Potassium bitartrate         | C <sub>4</sub> H <sub>6</sub> KO <sub>6</sub>                      | 000868-14-4 | saturated     | Xi          |                      | 1/1  | 1/1  | (2) | (2) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 1/0      | 1/0       | 0/0                | 1/1          | 1/1 | 1/1            | (2)  | (1)   | (1)          | 0/0 | (4) | 1/3  | 1/2     | 0/0  |     |                                                  |  |
| Potassium borate             | KBO <sub>2</sub>                                                   | 012228-88-5 | 10 %          | (Xn)        |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0                | 1/1          | 1/1 | 1/1            | 1/0  | 1/0   | 1/0          | 1/1 | 0/0 | (3)  | 0/0     | 0/0  | 0/0 |                                                  |  |
| Potassium borate             | KBO <sub>2</sub>                                                   | 012228-88-5 | aqueous       | (Xn)        |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | 1/1          | 1/1 | 1/1            | 1/0  | 1/0   | 1/0          | 1/1 | 0/0 | (3)  | 0/0     | 0/0  | 0/0 |                                                  |  |
| Potassium bromate            | KBrO <sub>3</sub>                                                  | 007758-01-2 | saturated     | O, T        |                      | 1/3  | 1/3  | (2) | 1/0 | 0/0  | 0/0 | (2) | 1/1 | 1/1 | 0/0 | 1/3      | 0/0       | 1/1                | 0/0          | (1) | 1/1            | 1/1  | 1/0   | 1/1          | 1/1 | 0/0 | (2)  | 0/0     | 0/0  | 0/0 |                                                  |  |
| Potassium bromate            | KBrO <sub>3</sub>                                                  | 007758-01-2 | aqueous       | O, T        |                      | 0/0  | 0/0  | (2) | (2) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | 0/0          | (1) | 1/1            | 1/1  | 1/0   | 1/1          | 1/1 | 0/0 | (2)  | 0/0     | 0/0  | 0/0 |                                                  |  |
| Potassium bromide            | KBr                                                                | 007758-02-3 | each          | Xn          |                      | 1/1  | 1/1  | 3/0 | 1/0 | (1)  | 1/0 | 1/1 | 1/1 | 1/1 | 0/0 | 1/3      | 1/0       | 1/1                | 0/0          | 1/1 | 1/1            | 1/1  | 1/0   | 1/1          | 1/1 | 0/0 | 1/0  | 1/0L    | 1/0L | 1/1 |                                                  |  |
| Potassium carbonate          | K <sub>2</sub> CO <sub>3</sub>                                     | 000584-08-7 | saturated     | Xn          |                      | 1/1  | 1/1  | 1/1 | 3/3 | (2)  | 1/1 | 1/1 | 1/1 | 1/1 | 0/0 | 1/1      | 1/1       | 1/1                | 0/0          | 1/1 | 1/1            | 1/3  | 1/0   | 1/0          | 1/1 | 0/0 | 4/4  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium carbonate          | K <sub>2</sub> CO <sub>3</sub>                                     | 000584-08-7 | aqueous       | Xn          |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | 1/1          | 1/1 | 1/1            | 1/0  | 1/0   | 1/1          | 0/0 | 4/4 | 1/1  | 1/1     | 1/1  |     |                                                  |  |
| Potassium chlorate           | KClO <sub>3</sub>                                                  | 003811-04-9 | saturated     | O, Xn       |                      | 1/1  | 0/0  | 1/0 | (2) | 0/0  | 0/0 | 2/0 | 1/1 | 1/0 | 0/0 | 1/1      | 0/0       | 0/0                | 0/0          | (1) | 1/1            | 1/1  | 1/0   | 1/1          | 4/4 | 0/0 | 1/1  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium chlorate           | KClO <sub>3</sub>                                                  | 003811-04-9 | aqueous       | O, Xn       |                      | 1/1  | 0/0  | 1/0 | (2) | 0/0  | 0/0 | 2/0 | 1/1 | 1/0 | 0/0 | 1/1      | 0/0       | 0/0                | 0/0          | (1) | 1/1            | 1/1  | 1/0   | 1/1          | 4/4 | 0/0 | 1/1  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium chloride           | KCl                                                                | 007447-40-7 | aqueous       | Xi          |                      | 1/1  | 1/1  | 1/0 | 1/0 | 1/0  | 1/0 | 1/1 | 1/1 | 1/1 | 1/0 | 1/1      | 1/1       | 1/1                | 1/1          | 1/1 | 1/1            | 1/0  | 1/1   | 1/1          | 0/0 | 1/3 | 1/1L | 1/1L    | 1/1  |     |                                                  |  |
| Potassium chromate           | K <sub>2</sub> CrO <sub>4</sub>                                    | 007789-00-6 | saturated     | T           |                      | 1/0  | 1/1  | 2/0 | (2) | 0/0  | 1/0 | (2) | 1/1 | 1/1 | 0/0 | 1/1      | 1/0       | 1/1                | 0/0          | (1) | 1/1            | 1/1  | 1/0   | 1/0          | 3/3 | 0/0 | 1/1  | (1)     | (1)  | 1/1 |                                                  |  |
| Potassium chromate           | K <sub>2</sub> CrO <sub>4</sub>                                    | 007789-00-6 | aqueous       | T           |                      | 0/0  | 0/0  | (2) | (2) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | (1)          | 1/1 | 1/1            | 1/0  | 1/0   | 3/3          | 0/0 | 1/1 | (1)  | (1)     | 1/1  |     |                                                  |  |
| Potassium cyanide            | KCN                                                                | 000151-50-8 | saturated     | T+          |                      | 1/1  | 1/1  | 1/0 | 4/4 | 0/0  | 0/0 | 3/0 | 1/1 | 0/0 | 0/0 | 1/3      | 4/4       | 0/0                | 0/0          | 1/1 | 1/1            | 1/3  | 1/0   | 1/1          | 3/3 | 0/0 | 3/4  | 1/0     | 1/0  | 1/1 |                                                  |  |
| Potassium cyanide            | KCN                                                                | 000151-50-8 | aqueous       | T+          |                      | 1/1  | 1/1  | 1/0 | 4/4 | 0/0  | 0/0 | 3/0 | 1/1 | 0/0 | 0/0 | 1/3      | 1/4       | 0/0                | 0/0          | 1/1 | 1/1            | 1/3  | 1/0   | 1/1          | 3/3 | 0/0 | 3/4  | 1/0     | 1/0  | 1/1 |                                                  |  |
| Potassium dichromate         | K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>                      | 007778-50-9 | saturated     | T           |                      | 1/1  | 1/0  | 4/4 | 3/0 | 3/0  | 1/0 | 3/0 | 1/1 | 1/3 | 0/0 | 1/3      | 1/0       | 1/3                | 0/0          | (1) | 1/1            | 1/1  | 1/0   | 2/0          | 3/3 | 0/0 | 1/1  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium dichromate         | K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>                      | 007778-50-9 | aqueous       | T           |                      | 0/0  | 0/0  | 3/0 | 1/0 | 3/0  | 0/0 | 3/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | 0/0          | (1) | 1/1            | 1/1  | 1/0   | 2/0          | 3/3 | 0/0 | 1/1  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium ferricyanide       | C <sub>6</sub> FeK <sub>3</sub> N <sub>6</sub>                     | 013746-66-2 | each          | Xn          |                      | 1/1  | 1/1  | 1/0 | (1) | (1)  | 0/0 | 2/0 | 1/1 | 1/1 | 0/0 | 1/3      | 1/1       | 0/0                | 1/1          | 1/1 | 1/1            | 1/1  | (1)   | (1)          | 0/0 | 1/1 | 1/1  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium ferrocyanide       | C <sub>6</sub> FeK <sub>4</sub> N <sub>6</sub> x 3H <sub>2</sub> O | 014459-95-1 | saturated     | —           |                      | 1/1  | 1/1  | 1/0 | (2) | (1)  | 0/0 | 2/0 | 1/1 | 0/0 | 0/0 | 1/1      | 1/1       | 0/0                | 1/1          | 1/1 | 1/1            | 1/1  | (1)   | (1)          | 0/0 | (1) | 1/1  | 1/1     | 1/1  |     |                                                  |  |
| Potassium ferrocyanide       | C <sub>6</sub> FeK <sub>4</sub> N <sub>6</sub> x 3H <sub>2</sub> O | 014459-95-1 | diluted       | —           |                      | 1/0  | 1/1  | 1/0 | (1) | (1)  | 0/0 | 2/0 | 1/1 | 0/0 | 0/0 | 1/3      | 1/0       | 0/0                | 1/1          | 1/1 | 1/1            | 1/1  | (1)   | (1)          | 0/0 | 1/1 | 1/1  | 1/1     | 1/1  |     |                                                  |  |
| Potassium fluoride           | KF                                                                 | 007789-23-3 |               | T           |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 1/1                | 1/1          | 1/1 | 1/1            | (1)  | (1)   | 1/0          | (1) | 0/0 | 1/1  | 1/1     | 1/1  | 0/0 |                                                  |  |
| Potassium hydrogen carbonate | CHKO <sub>3</sub>                                                  | 000298-14-6 | saturated     | —           |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | 1/1          | 1/1 | 1/1            | 1/1  | 1/1   | 1/0          | 1/1 | 0/0 | 4/4  | (1)     | (1)  | 1/1 |                                                  |  |
| Potassium hydroxide          | KHO                                                                | 001310-58-3 | 10 %          | C+          |                      | 1/1  | 1/1  | 1/0 | 4/4 | 4/4  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 1/1                | 1/1          | 1/1 | 1/1            | 1/0  | 4/4   | 3/3          | 0/0 | 4/4 | 1/1  | 1/1     | 1/1  |     | Caustic potash; Potassium hydrate; Potassium lye |  |
| Potassium hydroxide          | KHO                                                                | 001310-58-3 | 30 %          | C+          |                      | 1/1  | 1/1  | 1/3 | 4/4 | 4/4  | 1/0 | (3) | 1/1 | 1/0 | 1/0 | 1/3      | 1/0       | 0/0                | 0/0          | 0/0 | 1/1            | (2)  | 1/0   | 4/4          | 3/3 | 0/0 | 4/4  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium hydroxide          | KHO                                                                | 001310-58-3 | 50 %          | C+          |                      | 1/1  | 1/1  | 1/3 | 4/4 | 4/4  | 1/1 | 3/0 | 1/1 | 2/2 | 1/1 | 1/3      | 1/0       | 1/3                | 1/1          | 1/1 | 1/1            | 3/3  | 1/0   | 4/4          | 3/4 | 0/0 | 4/4  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium hydroxide          | KHO                                                                | 001310-58-3 | concentrated  | C+          |                      | 1/1  | 1/1  | 1/0 | 4/4 | 4/4  | 1/1 | 3/0 | 1/1 | 2/2 | 1/1 | 1/2      | 1/0       | 1/3                | 1/1          | 1/1 | 1/1            | 3/3  | 1/0   | 4/4          | 3/4 | 0/0 | 4/4  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium hydroxide          | KHO                                                                | 001310-58-3 | 1 %           | Xi          |                      | 1/1  | 1/1  | 1/0 | 3/4 | (4)  | 1/1 | 1/1 | 1/1 | 2/2 | 1/1 | 1/1      | 0/0       | 0/0                | 1/1          | 1/1 | 1/1            | 1/1  | 1/0   | 1/3          | 3/3 | 0/0 | 4/4  | 1/1     | 1/1  | 1/1 |                                                  |  |
| Potassium hypochlorite       | KClO                                                               | 007778-66-7 | diluted       | (O, C)      |                      | 1/0  | 1/3  | 3/0 | (3) | (3)  | 1/0 | 4/4 | 1/3 | 3/0 | 1/0 | 1/0      | 0/0       | 0/0                | 0/0          | (1) | 1/1            | 1/1  | 3/0   | 1/0          | 3/3 | 0/0 | 4/4  | 3/3L    | 2/2L | 1/1 |                                                  |  |
| Potassium iodate             | KJO <sub>3</sub>                                                   | 007758-05-6 |               | O           |                      | 0/0  | 0/0  | (2) | (2) | (2)  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 1/1                | 0/0          | (1) | 1/0            | 1/1  | (1)   | (1)          | (2) | 0/0 | 1/1  | 1/1     | 1/1  | 0/0 |                                                  |  |
| Potassium iodide             | KJ                                                                 | 007681-11-0 | saturated     | (Xn)        |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 0/0 | 1/1 | 1/1 | 1/1 | 1/0 | 1/1      | 1/0       | 1/1                | 1/1          | 1/1 | 1/1            | 1/1  | 1/0   | 1/1          | 1/3 | 0/0 | 1/1  | 1/1L    | 1/1L | 1/1 |                                                  |  |
| Potassium iodide             | KJ                                                                 | 007681-11-0 | aqueous       | (Xn)        |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0                | 1/1          | 1/1 | 1/1            | 1/1  | 1/0   | 1/1          | 1/3 | 0/0 | 1/1  | 1/1L    | 1/1L | 1/1 |                                                  |  |
| Potassium lye                | -> see: Potassium hydroxide                                        |             |               |             |                      |      |      |     |     |      |     |     |     |     |     |          |           |                    |              |     |                |      |       |              |     |     |      |         |      |     |                                                  |  |
| Potassium nitrate            | KNO <sub>3</sub>                                                   | 007757-79-1 | 50 %          | O, Xn       |                      | 1/1  | 1/1  | 1/0 | 1/0 | (1)  | 1/0 | 1/1 | 1/1 | 1/1 | 1/0 | 1/1      | 1/0       | 1/1                | 1/1</        |     |                |      |       |              |     |     |      |         |      |     |                                                  |  |

| CHEMICALS                          | FORMULA                                                       | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics |      |      |     |       |      |      |     |     |     |     |          |           | fluoroplastics |              | elastomers |      | metals |      | COMMENT |           |     |     |      |      |     |                                                          |
|------------------------------------|---------------------------------------------------------------|-------------|---------------|-------------|----------------|------|------|-----|-------|------|------|-----|-----|-----|-----|----------|-----------|----------------|--------------|------------|------|--------|------|---------|-----------|-----|-----|------|------|-----|----------------------------------------------------------|
|                                    |                                                               |             |               |             | FLAMMABLE      | HDPE | LDPE | PA  | PC    | PETG | PMPP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN            | ECTFE / ETFE | FEP        | PTFE | PVDF   | EPDM |         | FPM / FKM | NBR | SI  | AL   | V2A  | V4A | Hastelloy C                                              |
| Propenyl alcohol                   | -> see: Allyl alcohol                                         |             |               |             |                |      |      |     |       |      |      |     |     |     |     |          |           |                |              |            |      |        |      |         |           |     |     |      |      |     |                                                          |
| Propionic acid                     | C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>                  | 000079-09-4 | 50 %          | C, F        | X              | 1/3  | 1/3  | 3/3 | 4/4   | 0/0  | 0/0  | 4/4 | 1/1 | 4/4 | 4/4 | 1/3      | 3/3       | 0/0            | 0/0          | (1)        | 1/1  | 1/1    | 3/0  | 1/1     | 4/4       | 0/0 | 1/1 | (1)  | (1)  | 1/1 |                                                          |
| Propionic acid                     | C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>                  | 000079-09-4 |               | C, F+       | X              | 1/3  | 1/3  | 3/3 | 4/4   | 0/0  | 0/0  | 4/4 | 1/3 | 4/4 | 4/4 | 4/4      | 0/0       | 0/0            | 1/0          | 1/1        | 1/1  | 4/4    | 3/0  | 4/4     | 0/0       | 1/1 | 1/2 | 1/1  | 1/1  |     |                                                          |
| Propyl acetate, normal             | C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>                 | 000109-60-4 |               | F           | X              | 0/0  | 0/0  | (1) | 4/4   | 0/0  | (4)  | 1/0 | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | (1)          | (1)        | (2)  | 3/0    | 4/4  | 4/4     | 0/0       | (1) | (1) | (1)  |      |     |                                                          |
| Propyl alcohol                     | C <sub>3</sub> H <sub>8</sub> O                               | 000071-23-8 |               | F           | X              | 1/1  | 1/1  | 1/1 | 1/0   | 1/0  | 0/0  | 1/1 | 1/1 | 3/0 | 0/0 | 2/2      | 3/3       | 1/4            | 0/0          | 1/1        | 1/1  | 1/1    | 1/0  | 1/1     | 3/3       | 0/0 | 1/1 | (1)  | (1)  | 0/0 |                                                          |
| Propyl carbinol                    | -> see: Butyl alcohol, normal                                 |             |               |             |                |      |      |     |       |      |      |     |     |     |     |          |           |                |              |            |      |        |      |         |           |     |     |      |      |     |                                                          |
| Propyl nitrate                     | C <sub>3</sub> H <sub>7</sub> NO <sub>3</sub>                 | 000627-13-4 |               | (E, Xn)     | (X)            | 0/0  | 0/0  | (3) | (3)   | 0/0  | 0/0  | (3) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | (1)        | (1)  | (3)    | 3/0  | 4/4     | 4/4       | 0/0 | (2) | (1)  | (1)  |     |                                                          |
| Propylamine, n-                    | C <sub>3</sub> H <sub>9</sub> N                               | 000107-10-8 |               | F, C, Xn    | X              | 0/0  | 0/0  | 0/0 | (3)   | 0/0  | 0/0  | (2) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | (1)        | (1)  | (2)    | 4/4  | 4/4     | 4/4       | 0/0 | (1) | (1)  | (1)  |     |                                                          |
| Propylene                          | C <sub>3</sub> H <sub>6</sub>                                 | 000115-07-1 |               | F+          | X              | 1/1  | 1/1  | 1/0 | (3)   | 1/0  | 0/0  | 1/0 | 1/1 | 4/4 | 0/0 | 3/4      | 4/4       | 0/0            | 0/0          | (1)        | 1/1  | (1)    | 4/4  | 1/0     | 4/4       | 0/0 | 1/1 | 1/1  | 1/1  |     |                                                          |
| Propylene glycol                   | C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>                  | 000057-55-6 |               | —           |                | 1/1  | 1/1  | 4/4 | 2/3   | (2)  | 1/1  | 1/0 | 1/1 | 1/1 | 2/2 | 3/4      | 0/0       | 1/1            | 1/1          | 1/1        | 1/1  | 1/0    | 1/1  | 1/3     | 0/0       | 1/1 | (1) | (1)  | 1/1  |     |                                                          |
| Propylene oxid                     | C <sub>3</sub> H <sub>6</sub> O                               | 000075-56-9 |               | F+, T       | X              | 1/1  | 1/2  | (3) | 2/3   | 0/0  | 1/2  | (2) | 1/2 | 4/4 | 2/2 | 3/4      | 0/0       | 4/4            | 3/4          | 1/1        | 1/0  | 1/4    | 3/0  | 4/4     | 4/4       | 0/0 | (1) | (1)  | (1)  | 0/0 | Epoxypropane, 1,2-; Methyloxirane; Methyl ethylene oxide |
| Pydraul C (312, 540)               | —                                                             | —           |               | (Xn)        |                | 0/0  | 0/0  | 0/0 | 0/0   | 0/0  | 0/0  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | 0/0        | (1)  | 0/0    | 4/4  | 1/0     | 4/4       | 0/0 | 0/0 | (1)  | (1)  |     | based on phosphoric ester; Monsanto                      |
| Pydraul E (29, 30, 50, 65, 90, 11) | —                                                             | —           |               | (Xn)        |                | 0/0  | 0/0  | 0/0 | 0/0   | 0/0  | 0/0  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | 0/0        | (1)  | 0/0    | 1/0  | 1/0     | 4/4       | 0/0 | 0/0 | (1)  | (1)  |     | based on phosphoric ester; Monsanto                      |
| Pyridine                           | C <sub>5</sub> H <sub>5</sub> N                               | 000110-86-1 |               | F, Xn       | X              | 1/3  | 0/2  | 1/0 | 4/4   | 0/0  | 0/2  | 1/1 | 3/3 | 4/4 | 4/4 | 4/4      | 4/4       | 4/4            | 1/1          | (2)        | 1/1  | 1/3    | 4/4  | 4/4     | 4/4       | 0/0 | 1/1 | 1/1  | 1/1  | 0/0 | Azine; Azabenzene                                        |
| Pyrogalllic acid                   | C <sub>6</sub> H <sub>6</sub> O <sub>3</sub>                  | 000087-66-1 |               | Xn          |                | 0/0  | 0/0  | 1/0 | (3)   | 0/0  | 0/0  | 3/4 | 1/0 | 3/0 | 0/0 | 0/0      | 0/0       | 1/3            | 0/0          | (1)        | (1)  | 1/1    | (3)  | (3)     | (3)       | 0/0 | 1/1 | 1/1  | 1/1  | 1/1 |                                                          |
| Pyroligneous oil                   | —                                                             | 008001-20-5 |               | —           |                | 0/0  | 0/0  | (1) | (2)   | 1/0  | 0/0  | (1) | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | (1)        | (1)  | (1)    | 4/4  | (1)     | 1/0       | 0/0 | 1/1 | (1)  | (1)  |     |                                                          |
| Pyrrole                            | C <sub>4</sub> H <sub>5</sub> N                               | 000109-97-7 |               | Xn          | X              | 0/0  | 0/0  | (3) | (4)   | 0/0  | 0/0  | (2) | (3) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | (1)        | (1)  | (3)    | 4/4  | 4/4     | 4/4       | 0/0 | (1) | (1)  | (1)  |     | Azole; Imidole                                           |
| Quinine                            | C <sub>20</sub> H <sub>24</sub> N <sub>2</sub> O <sub>2</sub> | 000130-95-0 |               | Xn          |                | 1/1  | 1/1  | (2) | (2)   | (2)  | 0/0  | (1) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 1/1          | 1/1        | 1/1  | (1)    | (2)  | (2)     | (1)       | 0/0 | (2) | (1)  | (1)  | 0/0 |                                                          |
| Quinol                             | -> see: Hydroquinone                                          |             |               |             |                |      |      |     |       |      |      |     |     |     |     |          |           |                |              |            |      |        |      |         |           |     |     |      |      |     |                                                          |
| Ramasit                            | —                                                             | —           |               | ?           |                | 0/0  | 0/0  | 0/0 | 0/0   | 0/0  | 0/0  | 0/0 | 0/0 | 0/0 | 0/0 | 1/1      | 0/0       | 0/0            | 0/0          | 0/0        | (1)  | 1/1    | 0/0  | 0/0     | 0/0       | 0/0 | 0/0 | 0/0  | 0/0  | 0/0 | for moisture-proofing of textiles; BASF                  |
| Resorcinol                         | C <sub>6</sub> H <sub>6</sub> O <sub>2</sub>                  | 000108-46-3 | 5 %           | —           |                | 1/1  | 1/1  | 4/4 | 2/3   | 0/0  | 1/1  | (3) | 1/1 | 2/3 | 4/4 | 2/4      | 0/0       | 3/3            | 1/3          | 1/1        | (1)  | (3)    | (3)  | (3)     | (3)       | 0/0 | (2) | 0/0  | 0/0  | 0/0 |                                                          |
| Resorcinol                         | C <sub>6</sub> H <sub>6</sub> O <sub>2</sub>                  | 000108-46-3 | saturated     | Xn          |                | 1/1  | 1/1  | 4/4 | 2/3   | 0/0  | 1/1  | (3) | 1/1 | 2/3 | 4/4 | 3/4      | 0/0       | 0/0            | 1/1          | (1)        | (1)  | (3)    | (3)  | (3)     | (3)       | 0/0 | (2) | 0/0  | 0/0  | 0/0 |                                                          |
| Roaster off-gas                    | —                                                             | —           | each          | (T)         |                | 0/0  | 0/0  | (2) | 0/0   | 0/0  | 0/0  | (3) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | (1)        | (1)  | (2)    | 1/0  | 1/0     | 4/4       | 0/0 | (4) | (2)  | (2)  | 0/0 |                                                          |
| Rose oil                           | —                                                             | 008007-01-0 |               | ?           |                | 0/0  | 0/0  | (2) | (3)   | 0/0  | 0/0  | (2) | (2) | 4/4 | 0/0 | 0/0      | 0/0       | 3/0            | 0/0          | (1)        | (1)  | (2)    | (3)  | (3)     | (3)       | 0/0 | (1) | (1)  | (1)  |     |                                                          |
| Rum ether                          | —                                                             | 008030-89-5 |               | ?           |                | 0/0  | 0/0  | (2) | (3)   | 0/0  | 0/0  | (2) | (2) | 4/4 | 0/0 | 0/0      | 0/0       | 1/0            | 0/0          | (1)        | (1)  | (3)    | (3)  | (4)     | (3)       | 0/0 | (1) | (1)  | (1)  |     |                                                          |
| Sagrotan                           | —                                                             | —           | liquid        | ?           |                | 1/2  | 1/3  | 0/0 | 3/0   | 0/0  | 0/0  | (3) | 1/3 | 3/4 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | (1)        | (1)  | (2)    | 1/0  | 1/0     | 3/0       | 0/0 | (2) | (1)  | (1)  |     | disinfectant; Schülke & Mayr                             |
| Salicyl acid                       | C <sub>7</sub> H <sub>6</sub> O <sub>3</sub>                  | 000069-72-7 | saturated     | (Xn, Xi)    |                | 1/1  | 1/1  | 1/0 | 1/2   | 1/0  | 1/1  | 4/4 | 1/1 | 1/2 | 1/1 | 2/3      | 0/0       | 1/1            | 1/1          | 1/1        | 1/0  | 1/1    | 1/0  | 1/0     | 3/3       | 0/0 | 1/0 | 1/0  | 1/0  | 1/1 |                                                          |
| Salicyl acid                       | C <sub>7</sub> H <sub>6</sub> O <sub>3</sub>                  | 000069-72-7 | powder        | Xn, Xi      |                | 1/1  | 1/1  | 1/0 | 1/2   | (1)  | 1/2  | (3) | 1/1 | 1/1 | 1/1 | 2/3      | 0/0       | 0/0            | 1/1          | 1/1        | 1/0  | 1/1    | 1/0  | 1/0     | 3/3       | 0/0 | 1/0 | 1/0  | 1/0  | 1/1 |                                                          |
| Salicylaldehyde                    | C <sub>7</sub> H <sub>6</sub> O <sub>2</sub>                  | 000090-02-8 |               | Xn, Xi      |                | 1/1  | 1/2  | (3) | 2/3   | 0/0  | 1/2  | (3) | 1/2 | 4/4 | 3/3 | 3/4      | 0/0       | 0/0            | 1/4          | 1/1        | (1)  | (3)    | (3)  | (3)     | 4/4       | 0/0 | (2) | (1)  | (1)  | 1/1 |                                                          |
| Salt spring                        | NaCl                                                          | 007647-14-5 | saturated     | —           |                | 1/1  | 1/1  | 1/0 | (1)   | (1)  | 0/0  | 1/2 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | 1/1        | 1/1  | 1/1    | 1/1  | 1/0     | 1/1       | 1/1 | 0/0 | 3/4  | 1/3  | 1/2 | 0/0                                                      |
| Salt water, sea water              | —                                                             | —           |               | —           |                | 1/1  | 1/1  | 1/0 | 1/1   | 1/1  | 0/0  | 1/1 | 1/1 | 1/1 | 0/0 | 1/3      | 1/3       | 1/1            | 1/1          | 1/1        | 1/1  | 1/1    | 1/1  | 1/1     | 1/1       | 0/0 | 3/4 | 1/3L | 1/2L | 1/1 |                                                          |
| Salt peter                         | -> see: Potassium nitrate                                     |             |               |             |                |      |      |     |       |      |      |     |     |     |     |          |           |                |              |            |      |        |      |         |           |     |     |      |      |     |                                                          |
| Saturated steam condensate         | —                                                             | —           |               | ?           |                | 0/0  | 0/0  | (2) | (2)   | 0/0  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | (1)        | 1/1  | (2)    | (2)  | (2)     | (2)       | 0/0 | (2) | 1/1  | 1/1  |     |                                                          |
| Sea water                          | —                                                             | —           |               | —           |                | 1/1  | 1/1  | 1/0 | 1/1   | 1/1  | 0/0  | 1/1 | 1/1 | 1/1 | 0/0 | 1/3      | 1/3       | 1/1            | 1/1          | 1/1        | 1/1  | 1/1    | 1/1  | 1/1     | 1/1       | 0/0 | 3/4 | 1/3L | 1/2L | 1/1 |                                                          |
| Silicofluoric acid                 | H <sub>2</sub> SiF <sub>6</sub>                               | 016961-83-4 | 32 %          | C           |                | 1/1  | 1/1  | 4/4 | 1/0   | 4/4  | 0/0  | 4/4 | 1/1 | 0/0 | 0/0 | 1/1      | 0/0       | 0/0            | 1/1          | 1/1        | 1/1  | 1/1    | 3/0  | 2/2     | 3/4       | 0/0 | 4/4 | (2)  | 1/1  | 1/1 |                                                          |
| Silicone greases                   | —                                                             | —           |               | (—)         |                | 0/0  | 0/0  | 1/0 | 1/0   | 0/0  | 1/1  | 1/1 | 0/0 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | 1/1        | (1)  | (1)    | 1/0  | 1/0     | 1/1       | 0/0 | 1/1 | 1/1  | 1/1  |     |                                                          |
| Silicone oil                       | —                                                             | —           |               | ?           |                | 1/1  | 1/1  | 1/0 | 1/0   | 1/0  | 1/0  | 1/1 | 1/1 | 3/3 | 1/0 | 1/4      | 0/0       | 1/1            | 0/0          | 1/1        | 1/1  | (1)    | 1/0  | 1/1     | 1/1       | 0/0 | 1/1 | 1/1  | 1/1  | 1/1 | polysiloxane                                             |
| Silver acetate                     | C <sub>2</sub> H <sub>3</sub> AgO <sub>2</sub>                | 000563-63-3 |               | Xi          |                | 1/1  | 1/1  | (2) | 1/2   | (2)  | 1/1  | (2) | 1/1 | 2/2 | 1/1 | 2/2      | 0/0       | 0/0            | 1/1          | 1/1        | (1)  | (1)    | (1)  | (2)     | (3)       | 0/0 | (4) | 0/0  | 0/0  | 0/0 |                                                          |
| Silver cyanide                     | CAgN                                                          | 000506-64-9 |               | T           |                | 1/1  | 1/1  | (2) | (2)   | (2)  | 0/0  | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 1/1          | (1)        | (1)  | (1)    | (1)  | (3)     | 0/0       | (4) | 0/0 | 0/0  | 0/0  | 0/0 |                                                          |
| Silver nitrate                     | AgNO <sub>3</sub>                                             | 007761-88-8 | aqueous       | C           |                | 1/1  | 0/0  | 1/0 | 1/1   | (2)  | 0/0  | 1/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0            | 0/0          | 1/1        | 1/1  | 1/1    | 1/0  | 1/1     | 3/3       | 0/0 | 4/4 | 1/1  | 1/1  | 1/1 | lunar caustic                                            |
| Silver nitrate                     | AgNO <sub>3</sub>                                             | 007761-88-8 |               | C           |                | 1/1  | 1/2  | 1/0 | 1/1</ |      |      |     |     |     |     |          |           |                |              |            |      |        |      |         |           |     |     |      |      |     |                                                          |

| CHEMICALS                       | FORMULA                                                 | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics ----- |      |      |     |     |      |     |     |     |     | fluoroplastics --- |          |           | elastomers --- |              |     | metals ----- |      |      |           | Hastelloy C | COMMENT |     |      |      |      |                                                                        |                            |
|---------------------------------|---------------------------------------------------------|-------------|---------------|-------------|----------------------|------|------|-----|-----|------|-----|-----|-----|-----|--------------------|----------|-----------|----------------|--------------|-----|--------------|------|------|-----------|-------------|---------|-----|------|------|------|------------------------------------------------------------------------|----------------------------|
|                                 |                                                         |             |               |             | FLAMMABLE            | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU                | PVC HART | PVC WEICH | SAN            | ECTFE / ETFE | FEP | PTFE         | PVDF | EPDM | FPM / FKM |             |         | NBR | SI   | AL   | V2A  | V4A                                                                    |                            |
| Sodium carbonate                | Na <sub>2</sub> CO <sub>3</sub>                         | 000497-19-8 |               | Xi          |                      | 1/1  | 1/1  | 1/0 | 1/0 | 0/0  | 1/1 | 1/1 | 1/1 | 2/0 | 0/0                | 1/1      | 0/0       | 1/2            | 1/1          | 1/1 | 1/1          | 1/3  | 1/1  | 1/1       | 1/1         | 0/0     | 3/4 | 1/1  | 1/1  | 1/1  |                                                                        |                            |
| Sodium chlorate                 | NaClO <sub>3</sub>                                      | 007775-09-9 | each          | O, Xn       |                      | 1/1  | 1/0  | 1/0 | 0/0 | 1/0  | 1/0 | 2/0 | 1/1 | 1/0 | 0/0                | 1/3      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 2/3         | 0/0     | 1/0 | 1/1L | 1/1L | 1/1L | 1/1                                                                    | Chloric acid, sodium salt; |
| Sodium chlorate                 | NaClO <sub>3</sub>                                      | 007775-09-9 | aqueous       | O, Xn       |                      | 0/0  | 0/0  | 3/0 | 1/0 | 1/0  | 0/0 | 2/0 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 3/3         | 0/0     | 1/0 | 1/1L | 1/1L | 1/1L | 1/1                                                                    |                            |
| Sodium chloride                 | NaCl                                                    | 007647-14-5 | each          | —           |                      | 1/1  | 1/1  | 1/0 | 1/1 | 1/1  | 1/0 | 1/2 | 1/1 | 1/1 | 1/0                | 1/3      | 1/3       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1  | 1/1       | 1/1         | 0/0     | 3/4 | 1/2  | 1/2  | 1/1  |                                                                        |                            |
| Sodium chloride                 | NaCl                                                    | 007647-14-5 | aqueous       | —           |                      | 1/1  | 1/1  | 1/1 | 1/1 | 1/1  | 1/1 | 1/2 | 1/1 | 1/1 | 1/1                | 1/1      | 1/1       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1  | 1/1       | 1/1         | 1/1     | 3/4 | 1/2  | 1/2  | 1/1  |                                                                        |                            |
| Sodium chlorite                 | NaClO <sub>2</sub>                                      | 007758-19-2 | diluted       | (O, Xn)     |                      | 1/0  | 1/3  | 1/4 | (2) | 0/0  | 0/0 | (2) | 1/3 | 0/0 | 0/0                | 3/0      | 4/4       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 1/0  | 1/1       | 4/4         | 0/0     | 3/4 | 3/4  | 3/3  | 0/0  |                                                                        |                            |
| Sodium chromate                 | NaCrO <sub>4</sub>                                      | 007775-11-3 | diluted       | T           |                      | 1/0  | 1/0  | 1/1 | (2) | 0/0  | 0/0 | (2) | 1/1 | 1/1 | 0/0                | 1/3      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | 1/1  | 1/0  | 1/0       | 1/3         | 0/0     | 1/1 | 1/1  | 1/1  | 0/0  |                                                                        |                            |
| Sodium cyanide                  | CNNa                                                    | 000143-33-9 | saturated     | T           |                      | 1/1  | 1/1  | 1/0 | (3) | 0/0  | 0/0 | 3/0 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0  | 1/0       | 3/3         | 0/0     | 4/4 | (2)  | (2)  | 0/0  | Hydrocyanic acid, sodium salt;                                         |                            |
| Sodium cyanide                  | CNNa                                                    | 000143-33-9 | aqueous       | T           |                      | 1/1  | 1/1  | 1/0 | (3) | 1/0  | 0/0 | 3/0 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0  | 1/0       | 1/0         | 0/0     | 4/4 | (2)  | (2)  | 0/0  |                                                                        |                            |
| Sodium dichromate               | Na <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>          | 010588-01-9 |               | T           |                      | 0/0  | 1/1  | 1/0 | 1/0 | 3/0  | 1/1 | (3) | 1/1 | 1/1 | 0/0                | 1/0      | 0/0       | 0/0            | 1/1          | (1) | 1/1          | 1/1  | 1/0  | 1/0       | 3/3         | 0/0     | 1/1 | (1)  | (1)  | 1/1  |                                                                        |                            |
| Sodium dithionite               | -> see: Sodium hydrosulfite                             |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |     |      |      |      |                                                                        |                            |
| Sodium dodecylbenzene sulfonate | C <sub>18</sub> H <sub>29</sub> NaSO <sub>3</sub>       | 025155-30-0 |               | Xn          |                      | 1/1  | 1/1  | (2) | (2) | 1/0  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | (1)  | (1)  | (1)       | (2)         | 0/0     | (1) | (1)  |      |      |                                                                        |                            |
| Sodium ferrocyanide             | C <sub>6</sub> FeNa <sub>4</sub> N <sub>6</sub>         | 013601-19-9 |               | Xn          |                      | 1/1  | 1/1  | (1) | (2) | (1)  | 0/0 | (2) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | 1/1 | (1)          | (1)  | (1)  | (2)       | 0/0         | (1)     | (1) |      |      |      |                                                                        |                            |
| Sodium fluoride                 | NaF                                                     | 007681-49-4 | saturated     | T           |                      | 1/1  | 1/1  | 1/0 | (2) | (1)  | 1/0 | 1/1 | 1/1 | 1/0 | 0/0                | 1/0      | 1/3       | 1/1            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0  | 1/0       | 1/1         | 0/0     | 1/1 | 0/0  | 0/0  | 1/1  |                                                                        |                            |
| Sodium hydrosulfite             | Na <sub>2</sub> S <sub>2</sub> O <sub>4</sub>           | 007775-14-6 | 10 %          | Xn          |                      | 1/1  | 0/0  | (2) | (2) | (2)  | 0/0 | (2) | 1/1 | 0/0 | 0/0                | 1/3      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | 1/3  | 1/0  | 1/1       | 3/3         | 0/0     | 4/4 | 1/1  | 1/1  |      | Sodium dithionite; Dithionous acid, disodium salt; Sodium sulfoxylate; |                            |
| Sodium hydrosulfite             | Na <sub>2</sub> S <sub>2</sub> O <sub>4</sub>           | 007775-14-6 |               | Xn          |                      | 1/1  | 0/0  | (2) | (2) | (2)  | 0/0 | (2) | 1/1 | 0/0 | 0/0                | 1/3      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | 1/3  | 1/0  | 1/1       | 3/3         | 0/0     | 4/4 | 1/1  | 1/1  |      |                                                                        |                            |
| Sodium hydroxide                | NaOH                                                    | 001310-73-2 | concentrated  | C           |                      | 1/1  | 1/1  | 1/3 | 4/4 | 4/4  | 0/0 | (3) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 0/0 | 1/1          | (2)  | 1/0  | 4/4       | 3/4         | 0/0     | 4/4 | (2)  | (2)  | ?    | caustic soda, sodium hydrate, soda lye                                 |                            |
| Sodium hydroxide                | NaOH                                                    | 001310-73-2 | 30 %          | C+          |                      | 1/1  | 1/1  | 1/0 | 4/4 | 4/4  | 1/0 | 1/3 | 1/1 | 1/0 | 1/0                | 1/3      | 1/3       | 0/0            | 0/0          | 1/1 | 1/1          | (2)  | 1/0  | (3)       | 2/3         | 0/0     | 4/4 | 1/3  | 1/3  | 1/1  | caustic soda, sodium hydrate, soda lye                                 |                            |
| Sodium hydroxide                | NaOH                                                    | 001310-73-2 | 45 %          | C+          |                      | 1/1  | 1/1  | 1/0 | 4/4 | 4/4  | 1/0 | 1/3 | 1/1 | 1/1 | 1/0                | 1/3      | 1/3       | 1/1            | 0/0          | 0/0 | 1/1          | (2)  | 1/0  | 2/4       | 2/3         | 0/0     | 4/4 | 1/3  | 1/3  | 1/1  | caustic soda, sodium hydrate, soda lye                                 |                            |
| Sodium hydroxide                | NaOH                                                    | 001310-73-2 | 50 %          | C+          |                      | 1/1  | 1/1  | 1/0 | 4/4 | 4/4  | 1/1 | 1/3 | 1/1 | 2/2 | 1/1                | 1/2      | 0/0       | 0/3            | 1/1          | 1/1 | 1/1          | 3/3  | 1/0  | 3/4       | 3/3         | 0/0     | 4/4 | 1/3  | 1/3  | 1/1  | caustic soda, sodium hydrate, soda lye                                 |                            |
| Sodium hydroxide                | NaOH                                                    | 001310-73-2 | 60 %          | C+          |                      | 1/1  | 1/1  | 1/0 | 4/4 | 4/4  | 1/0 | (3) | 1/1 | 1/0 | 1/0                | 0/0      | 0/0       | 0/0            | 0/0          | 0/0 | 1/1          | (2)  | 1/0  | 3/4       | 2/3         | 0/0     | 4/4 | 1/3  | 1/3  | 1/1  | caustic soda, sodium hydrate, soda lye                                 |                            |
| Sodium hydroxide                | NaOH                                                    | 001310-73-2 | 1 %           | Xi          |                      | 1/1  | 1/1  | 1/0 | 3/4 | (3)  | 1/1 | 1/1 | 1/1 | 2/2 | 1/1                | 1/1      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/0  | 1/1  | 1/1       | 1/3         | 0/0     | (4) | 1/1  | 1/1  | 1/1  | caustic soda, sodium hydrate, soda lye                                 |                            |
| Sodium hypochlorite             | NaClO                                                   | 007681-52-9 | diluted       | (O, C)      |                      | 2/3  | 2/3  | 4/4 | (3) | 3/0  | 1/3 | 4/4 | 2/3 | 1/3 | 1/1                | 1/3      | 1/0       | 1/1            | 0/0          | 1/1 | 1/1          | 1/3  | 3/0  | 1/3       | 4/4         | 0/0     | 4/4 | 3/3L | 2/2L | 0/0  | sodium oxychloride, sodium chloride oxide                              |                            |
| Sodium hypochlorite             | NaClO                                                   | 007681-52-9 | 15 %          | O, C        |                      | 2/3  | 2/3  | 4/4 | 2/3 | (3)  | 1/3 | 4/4 | 2/3 | 1/3 | 1/1                | 1/3      | 1/0       | 1/1            | 1/1          | 1/1 | 1/1          | 1/4  | 3/0  | 1/3       | 4/4         | 0/0     | 4/4 | 3/3L | 2/2L | 0/0  | sodium oxychloride, sodium chloride oxide                              |                            |
| Sodium hypochlorite             | NaClO                                                   | 007681-52-9 | saturated     | O, C        |                      | 2/3  | 2/3  | 4/4 | 2/3 | (3)  | 1/3 | 4/4 | 2/3 | 1/3 | 1/1                | 1/3      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | (3)  | 3/0  | 1/3       | 4/4         | 0/0     | 4/4 | 3/3L | 2/2L | 0/0  | sodium oxychloride, sodium chloride oxide                              |                            |
| Sodium hypochlorite             | NaClO                                                   | 007681-52-9 | 12,5 % Cl     | O, C        |                      | 2/3  | 2/3  | 4/4 | 2/3 | (3)  | 1/3 | 4/4 | 2/3 | 1/3 | 1/1                | 1/3      | 1/0       | 1/1            | 1/1          | 1/1 | 1/1          | 1/4  | 3/0  | 1/3       | 4/4         | 0/0     | 4/4 | 3/3L | 2/2L | 0/0  | sodium oxychloride, sodium chloride oxide                              |                            |
| Sodium iodide                   | NaI                                                     | 007681-82-5 | each          | Xi          |                      | 1/1  | 1/1  | (2) | (1) | (1)  | 0/0 | 1/1 | 1/0 | 0/0 | 0/0                | 1/3      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/3  | (1)  | (1)       | 1/1         | 0/0     | 1/1 | 3/4  | 3/4  | 0/0  |                                                                        |                            |
| Sodium metabisulfite            | Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub>           | 007681-57-4 | each          | Xn          |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 0/0 | 4/4 | 1/1 | 0/0 | 0/0                | 1/3      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 1/0  | 1/0       | 1/0         | 0/0     | 1/0 | 1/1  | 1/1  | 1/1  |                                                                        |                            |
| Sodium nitrate                  | NaNO <sub>3</sub>                                       | 007631-99-4 | saturated     | O, Xn       |                      | 1/1  | 1/1  | 1/0 | 1/0 | (1)  | 1/0 | 1/1 | 1/1 | 1/1 | 1/0                | 1/3      | 1/3       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 2/3         | 0/0     | 1/1 | 1/1  | 1/1  | 1/1  | chile saltpeter                                                        |                            |
| Sodium nitrate                  | NaNO <sub>3</sub>                                       | 007631-99-4 | aqueous       | O, Xn       |                      | 1/1  | 1/1  | 1/0 | 1/0 | 0/0  | 1/0 | 1/1 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 1/0         | 0/0     | 1/1 | 1/1  | 1/1  | 1/1  | chile saltpeter                                                        |                            |
| Sodium nitrite                  | NaNO <sub>2</sub>                                       | 007632-00-0 | saturated     | O, T        |                      | 1/1  | 1/1  | 1/0 | (2) | (1)  | 1/0 | 1/1 | 1/1 | 1/1 | 0/0                | 1/0      | 1/0       | 1/1            | 0/0          | (1) | 1/1          | 1/1  | 1/0  | 1/1       | 2/3         | 0/0     | 1/0 | 1/1  | 1/1  | 1/1  | Nitrous acid, sodium salt;                                             |                            |
| Sodium nitrite                  | NaNO <sub>2</sub>                                       | 007632-00-0 | aqueous       | O, T        |                      | 1/1  | 1/1  | 1/0 | (2) | 1/0  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 1/0  | 1/1       | 1/0         | 0/0     | 1/0 | 1/1  | 1/1  | 1/1  |                                                                        |                            |
| Sodium oxalate                  | C <sub>2</sub> Na <sub>2</sub> O <sub>4</sub>           | 000062-76-0 | saturated     | Xn          |                      | 1/1  | 1/1  | (1) | (1) | (1)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0                | 1/3      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/3  | (1)  | 1/0       | 1/0         | 0/0     | 1/1 | (2)  | (2)  |      |                                                                        |                            |
| Sodium perborate                | NaBO <sub>2</sub> (HO) <sub>2</sub> x 3H <sub>2</sub> O | 013517-20-9 | saturated     | (O, Xn)     |                      | 1/1  | 1/1  | 4/4 | (2) | 0/0  | 0/0 | 2/0 | 1/1 | 1/1 | 0/0                | 1/0      | 3/0       | 1/1            | 0/0          | (1) | 1/1          | 1/1  | 1/0  | 1/0       | 3/0         | 0/0     | 1/0 | 1/0  | 1/0  | 1/0  |                                                                        |                            |
| Sodium perborate                | NaBO <sub>2</sub> (HO) <sub>2</sub> x 3H <sub>2</sub> O | 013517-20-9 | aqueous       | (O, Xn)     |                      | 1/1  | 1/1  | 4/4 | (2) | 3/0  | 0/0 | 2/0 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 1/0  | 1/0       | 3/0         | 0/0     | 1/0 | 1/0  | 1/0  | 1/0  |                                                                        |                            |
| Sodium perchlorate              | NaClO <sub>4</sub>                                      | 007601-89-0 | saturated     | O, Xn       |                      | 1/1  | 1/1  | (2) | (1) | (1)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0                | 1/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 1/0  | 1/0       | (1)         | 0/0     | 1/1 | 1/1  | 1/1  | 1/1  |                                                                        |                            |
| Sodium peroxide                 | Na <sub>2</sub> O <sub>2</sub>                          | 001313-60-6 | 10 %          | O, C+       |                      | 0/0  | 1/3  | 4/4 | (3) | (4)  | 0/0 | 4/4 |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |     |      |      |      |                                                                        |                            |



| CHEMICALS              | FORMULA                                                       | CAS-NR.     | CONCENTRATION            | HAZARD NOTE | thermoplastics ----- |      |      |     |     |      |     |     |     |     | fluoroplastics --- |          |           | elastomers --- |              |     | metals ----- |      |      |           | Hastelloy C | COMMENT |     |                      |                      |     |                                                                                                                                                                   |                    |
|------------------------|---------------------------------------------------------------|-------------|--------------------------|-------------|----------------------|------|------|-----|-----|------|-----|-----|-----|-----|--------------------|----------|-----------|----------------|--------------|-----|--------------|------|------|-----------|-------------|---------|-----|----------------------|----------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                        |                                                               |             |                          |             | FLAMMABLE            | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU                | PVC HART | PVC WEICH | SAN            | ECTFE / ETFE | FEP | PTFE         | PVDF | EPDM | FPM / FKM |             |         | NBR | SI                   | AL                   | V2A | V4A                                                                                                                                                               |                    |
| Soya oil               | —                                                             | 008001-22-7 | —                        | —           | —                    | 0/0  | 0/0  | (2) | (1) | 1/0  | 0/0 | 2/0 | 1/0 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 0/0 | 1/1          | 1/1  | 1/1  | 4/4       | 1/1         | 1/0     | 0/0 | (1)                  | 1/1                  | 1/1 | 1/1                                                                                                                                                               |                    |
| Spermaceti             | —                                                             | 008002-23-1 | —                        | —           | —                    | 0/0  | 1/3  | (1) | 1/1 | 1/0  | 0/0 | —   | 1/0 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 4/4  | 1/0       | 1/0         | 0/0     | (1) | 1/1                  | 1/1                  | 1/1 | 1/1                                                                                                                                                               |                    |
| Spindle oil            | —                                                             | —           | —                        | ?           | —                    | 3/3  | 2/3  | (2) | (2) | 1/0  | 0/0 | (2) | 1/4 | 0/0 | 0/0                | 3/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | (4)  | 1/1       | 1/1         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/1 | 1/1                                                                                                                                                               |                    |
| Spinning bath acid     | —                                                             | —           | 100mg CS <sub>2</sub> /l | ?           | —                    | 1/0  | 0/0  | 4/4 | (3) | 0/0  | 0/0 | 4/4 | 1/0 | 0/0 | 0/0                | 1/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/0  | (3)  | (2)       | 4/4         | 0/0     | (4) | 3/4                  | 2/4                  | 0/0 |                                                                                                                                                                   |                    |
| Spirit (of wine)       | C <sub>2</sub> H <sub>6</sub> O                               | —           | —                        | F           | X                    | 1/0  | 1/3  | 1/0 | 1/3 | 1/1  | 1/2 | 1/2 | 1/1 | 3/4 | 1/2                | 1/3      | 3/0       | 1/3            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 3/0       | 3/3         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/1 | ethyl alcohol                                                                                                                                                     |                    |
| Spirits                | C <sub>2</sub> H <sub>6</sub> O                               | —           | —                        | —           | —                    | 1/1  | 1/0  | 1/0 | 1/1 | 1/1  | 0/0 | 1/2 | 1/1 | 0/0 | 1/0                | 1/1      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/0       | 1/1         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/1 | 0/0                                                                                                                                                               | ethyl alcohol 40 % |
| Spirits of Turpentine  | —                                                             | 008006-64-2 | —                        | Xn          | X                    | 2/2  | 3/4  | 1/0 | 4/4 | 1/0  | 3/3 | 1/1 | 4/4 | 4/4 | 4/4                | 2/3      | 4/4       | 3/3            | 1/1          | 1/1 | 1/0          | 1/3  | 4/4  | 1/1       | 3/3         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/1 | 1/1                                                                                                                                                               |                    |
| Spirits of wine        | C <sub>2</sub> H <sub>6</sub> O                               | —           | 50 %                     | (F)         | X                    | 1/0  | 1/1  | 1/0 | 1/1 | 1/1  | 1/0 | 1/2 | 1/1 | 1/0 | 1/0                | 1/0      | 3/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0  | (2)       | 1/1         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/1 | ethyl alcohol                                                                                                                                                     |                    |
| Spirits of wine        | C <sub>2</sub> H <sub>6</sub> O                               | —           | 96 %                     | F           | X                    | 1/0  | 1/3  | 1/0 | 1/3 | 1/1  | 1/2 | 1/2 | 1/1 | 3/4 | 1/2                | 1/3      | 3/0       | 1/3            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 3/0       | 3/3         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/1 | ethyl alcohol                                                                                                                                                     |                    |
| Spruce oil             | —                                                             | 008008-80-8 | —                        | ?           | —                    | 1/2  | 2/4  | (2) | 2/3 | 0/0  | 2/3 | (2) | 1/2 | 4/4 | 3/3                | 3/4      | 0/0       | 3/4            | 1/2          | 1/1 | (1)          | (2)  | 4/4  | 1/0       | 3/3         | 0/0     | (1) | (1)                  | (1)                  |     | pinus sylvestris                                                                                                                                                  |                    |
| Stannic chloride       | SnCl <sub>4</sub>                                             | 007646-78-8 | aqueous                  | C           | —                    | 1/1  | 1/1  | 4/4 | (3) | 0/0  | 0/0 | (4) | 1/1 | 4/4 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0  | 1/0       | 1/0         | 0/0     | 4/4 | 4/4                  | 3/4                  |     |                                                                                                                                                                   |                    |
| Stannous chloride      | SnCl <sub>2</sub>                                             | 007772-99-8 | aqueous                  | (C, Xn)     | —                    | 1/1  | 1/1  | (4) | (2) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 4/4 | 4/4                  | 3/4                  | 1/1 |                                                                                                                                                                   |                    |
| Stannous chloride      | SnCl <sub>2</sub>                                             | 007772-99-8 | saturated                | C, Xn       | —                    | 1/1  | 1/1  | 4/4 | 1/0 | 0/0  | 0/0 | (2) | 1/1 | 1/1 | 0/0                | 1/1      | 1/0       | 1/1            | 0/0          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 4/4 | 4/4                  | 3/4                  | 1/1 |                                                                                                                                                                   |                    |
| Starch solution        | (C <sub>6</sub> H <sub>10</sub> O <sub>5</sub> ) <sub>n</sub> | —           | each                     | —           | —                    | 1/1  | 1/1  | 1/1 | 1/1 | 1/1  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0                | 1/1      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1  | 1/1       | 1/1         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/1 | 0/0                                                                                                                                                               |                    |
| Starch syrup           | —                                                             | —           | —                        | —           | —                    | 1/1  | 1/1  | 1/1 | 1/1 | 1/1  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0                | 1/1      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1  | 1/1       | 1/1         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/1 | 0/0                                                                                                                                                               |                    |
| Stauffer grease, thick | —                                                             | —           | —                        | (—)         | —                    | 0/0  | 0/0  | (2) | (1) | 0/0  | (1) | (2) | 1/4 | 0/0 | 0/0                | 0/0      | 0/0       | 1/1            | 0/0          | (1) | 1/1          | (1)  | 4/4  | (1)       | (2)         | 0/0     | (1) | 1/1                  | 1/1                  | 1/1 | 0/0                                                                                                                                                               |                    |
| Steam                  | H <sub>2</sub> O                                              | —           | up to 150°C              | ?           | —                    | 4    | 4    | 4/4 | 0/0 | 0    | 0   | (3) | (3) | 0   | 0                  | 0        | 0         | 0              | 0            | 0   | 0            | 1    | 3    | 4/4       | 0           | (1)     | 1/1 | 1/1                  |                      |     |                                                                                                                                                                   |                    |
| Stearic acid           | C <sub>18</sub> H <sub>36</sub> O <sub>2</sub>                | 000057-11-4 | crystals                 | Xi          | —                    | 1/3  | 1/3  | 1/0 | 1/2 | 1/0  | 1/1 | 1/0 | 1/3 | 1/2 | 2/2                | 1/2      | 1/1       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 3/0  | 1/1       | 3/3         | 0/0     | 1/1 | 1/1                  | 1/1                  | 1/1 |                                                                                                                                                                   |                    |
| Strontium bromide      | SrBr <sub>2</sub>                                             | 010476-81-0 | —                        | Xi          | —                    | 1/1  | 1/1  | (2) | (1) | (1)  | 0/0 | (1) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 1/1            | 0/0          | 1/1 | 1/1          | (1)  | (1)  | (1)       | (2)         | 0/0     | (3) | 0/0                  | 0/0                  |     |                                                                                                                                                                   |                    |
| Strychnine             | C <sub>21</sub> H <sub>22</sub> N <sub>2</sub> O <sub>2</sub> | 000057-24-9 | —                        | T+          | —                    | 1/1  | 1/1  | (1) | (1) | (2)  | 0/0 | (2) | (1) | 1/1 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | (1)  | (2)  | (2)       | (2)         | 0/0     | (2) | (1)                  | (1)                  |     |                                                                                                                                                                   |                    |
| Styrene                | C <sub>8</sub> H <sub>8</sub>                                 | 000100-42-5 | 100 %                    | Xn, Xi      | X                    | 4/4  | 3/4  | 1/1 | 4/4 | 1/1  | (4) | 1/1 | 3/4 | 0/0 | 0/0                | 4/4      | 4/4       | 0/0            | 0/0          | 1/0 | 1/1          | (2)  | 4/4  | 3/0       | 4/4         | 0/0     | 1/1 | 1/1                  | 1/1                  | 0/0 |                                                                                                                                                                   |                    |
| Succinic acid          | C <sub>4</sub> H <sub>6</sub> O <sub>4</sub>                  | 000110-15-6 | 50 %                     | Xi          | —                    | 1/1  | 1/1  | (3) | (2) | 0/0  | 0/0 | (3) | 1/1 | 0/0 | 0/0                | 2/0      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | (1)         | 0/0     | 1/1 | 1/0                  | 1/0                  | 1/1 |                                                                                                                                                                   |                    |
| Succinic acid          | C <sub>4</sub> H <sub>6</sub> O <sub>4</sub>                  | 000110-15-6 | saturated                | Xi          | —                    | 1/1  | 1/1  | (3) | (2) | 0/0  | 0/0 | (3) | 1/1 | 1/1 | 0/0                | 1/3      | 1/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 1/1 | 1/0                  | 1/0                  | ?   |                                                                                                                                                                   |                    |
| Sugar acid             | —                                                             | —           | saturated                | (Xi)        | —                    | 1/1  | 1/1  | (3) | (2) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/1 | 1/1          | (1)  | 1/0  | (1)       | (1)         | 0/0     | (3) | 0/0                  | 0/0                  |     |                                                                                                                                                                   |                    |
| Sugar beet juice       | —                                                             | —           | —                        | —           | —                    | 1/1  | 1/1  | 1/0 | 1/0 | 0/0  | 1/0 | 1/1 | 1/1 | 1/0 | 0/0                | 1/0      | 1/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/0       | 1/1         | 0/0     | (2) | (1)                  | (1)                  |     |                                                                                                                                                                   |                    |
| Sugar syrup            | —                                                             | —           | —                        | —           | —                    | 1/1  | 1/1  | 1/1 | 1/1 | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1                | 1/3      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/1  | 1/1       | 1/1         | 1/1     | 1/1 | 1/1                  | 1/1                  | 1/1 |                                                                                                                                                                   |                    |
| Sulfur                 | S <sub>8</sub>                                                | 007704-34-9 | techn. pure              | Xi          | —                    | 1/1  | 1/1  | 1/0 | 1/0 | (2)  | 0/0 | 1/0 | 1/1 | 1/1 | 0/0                | 3/0      | 3/4       | 1/1            | 0/0          | (1) | 1/1          | 1/1  | 3/0  | 1/1       | 4/4         | 0/0     | (1) | 1/1                  | 1/1                  | 1/1 | 1/1                                                                                                                                                               | flower of sulfur   |
| Sulfur (mono)chloride  | S <sub>2</sub> Cl <sub>2</sub>                                | 010025-67-9 | —                        | C           | —                    | 0/0  | 0/0  | 4/4 | (3) | 0/0  | 0/0 | 4/4 | 4/4 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | 1/0 | 1/1          | 1/0  | 4/4  | 1/0       | 4/4         | 0/0     | 3/4 | (1/1L) <sup>1)</sup> | (1/1L) <sup>1)</sup> | 0/0 | <sup>1)</sup> Water-free! If even traces of hydrochloric acid (HCl) are split off by moisture, there is a risk of pitting, crevice and stress corrosion cracking. |                    |
| Sulfur dioxide         | SO <sub>2</sub>                                               | 007446-09-5 | damp                     | T, C        | —                    | 1/1  | 1/1  | (3) | (3) | 0/0  | 1/1 | 4/4 | 1/3 | 3/4 | 2/2                | 1/2      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/4  | 1/0  | 4/4       | 4/4         | 0/0     | 3/4 | 1/1                  | 1/1                  | 1/0 | with H2O->sulfurous acid                                                                                                                                          |                    |
| Sulfur dioxide         | SO <sub>2</sub>                                               | 007446-09-5 | liquid                   | T, C        | —                    | 3/4  | 4/4  | (3) | 3/4 | 0/0  | 4/4 | 4/4 | 4/4 | 4/4 | 2/2                | 3/4      | 0/0       | 0/0            | 1/2          | 1/1 | 1/1          | 4/4  | 1/0  | 4/4       | 4/4         | 0/0     | (3) | (1)                  | (1)                  | 1/0 | with H2O->sulfurous acid                                                                                                                                          |                    |
| Sulfur hexafluoride    | SF <sub>6</sub>                                               | 002551-62-4 | —                        | —           | —                    | 0/0  | 0/0  | 1/0 | (2) | 1/0  | 0/0 | 1/0 | (2) | 0/0 | 0/0                | 0/0      | 0/0       | 1/0            | 0/0          | 0/0 | (1)          | (2)  | 1/0  | 3/0       | 1/0         | 0/0     | (1) | (1)                  | (1)                  |     |                                                                                                                                                                   |                    |
| Sulfur trioxide        | SO <sub>3</sub>                                               | 007446-11-9 | —                        | C+          | —                    | 4/4  | 4/4  | 4/4 | (4) | (4)  | 0/0 | 4/4 | 4/4 | 0/0 | 0/0                | 4/4      | 0/0       | 0/0            | 0/0          | (2) | (2)          | 3/4  | 3/0  | 1/0       | 4/4         | 0/0     | (3) | (1)                  | (1)                  | 0/0 |                                                                                                                                                                   |                    |
| Sulfur, melted, 121 °C | S <sub>8</sub>                                                | 007704-34-9 | —                        | ?           | —                    | 0    | 0    | (4) | (3) | 0    | 4   | 4   | 4   | 4   | 0                  | 0        | 0         | 4              | 0            | 0   | (1)          | 0    | 4    | 1         | 4           | 0       | (3) | 1                    | 1                    | 0/0 |                                                                                                                                                                   |                    |
| Sulfuric acid          | H <sub>2</sub> SO <sub>4</sub>                                | 007664-93-9 | 40 %                     | C+          | —                    | 1/1  | 1/1  | 4/4 | 2/0 | (4)  | 1/2 | 4/4 | 1/1 | 2/0 | 3/0                | 1/3      | 1/3       | 1/1            | 1/1          | 1/1 | 1/1          | (3)  | 1/1  | 4/4       | 0/0         | 3/4     | 2/3 | 2/3                  | 0/0                  |     |                                                                                                                                                                   |                    |
| Sulfuric acid          | H <sub>2</sub> SO <sub>4</sub>                                | 007664-93-9 | 60 %                     | C+          | —                    | 1/3  | 1/3  | 4/4 | 3/3 | (4)  | 1/2 | 4/4 | 1/3 | 2/4 | 1/1                | 1/2      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 4/4  | 1/1       | 4/4         | 0/0     | 4/4 | 4/4                  | 3/4                  | 0/0 |                                                                                                                                                                   |                    |
| Sulfuric acid          | H <sub>2</sub> SO <sub>4</sub>                                | 007664-93-9 | 80 %                     | C+          | —                    | 1/1  | 1/1  | 4/4 | 3/4 | 4/4  | 1/2 | 4/4 | 1/1 | 3/4 | 3/0                | 1/1      | 1/3       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 4/4  | 1/1       | 4/4         | 0/0     | 4/4 | 2/4                  | 2/3                  | 0/0 |                                                                                                                                                                   |                    |
| Sulfuric acid          | H <sub>2</sub> SO <sub>4</sub>                                | 007664-93-9 | 95 %                     | C+          | —                    | 3/4  | 3/4  | 4/4 | 4/4 | 4/4  | 2/2 | 4/4 | 3/4 | 4/4 | 4/4                | 2/4      | 0/0       | 4/4            | 1/1          | 1/1 | 1/1          | 1/1  | 4/4  | 1/1       | 4/4         | 0/0     | 4/4 | 1/3                  | <                    |     |                                                                                                                                                                   |                    |

| CHEMICALS                          | FORMULA                                         | CAS-NR.     | CONCENTRATION | HAZARD NOTE | thermoplastics ----- |      |      |     |     |      |     |     |     |     | fluoroplastics --- |          |           | elastomers --- |              |     | metals ----- |      |      |           | Hastelloy C | COMMENT |                      |                      |     |                              |                                                                                                                                                                   |                                    |
|------------------------------------|-------------------------------------------------|-------------|---------------|-------------|----------------------|------|------|-----|-----|------|-----|-----|-----|-----|--------------------|----------|-----------|----------------|--------------|-----|--------------|------|------|-----------|-------------|---------|----------------------|----------------------|-----|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
|                                    |                                                 |             |               |             | FLAMMABLE            | HDPE | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU                | PVC HART | PVC WEICH | SAN            | ECTFE / ETFE | FEP | PTFE         | PVDF | EPDM | FPM / FKM |             |         | NBR                  | SI                   | AL  | V2A                          | V4A                                                                                                                                                               |                                    |
| Tetrahydrofurfuryl alcohol         | C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>   | 000097-99-4 |               | Xi          |                      | 0/0  | 0/0  | (2) | (3) | 0/0  | 0/0 | (2) | (2) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | (3)  | (3)       | (4)         | 0/0     | (2)                  | (1)                  | (1) |                              |                                                                                                                                                                   |                                    |
| Tetrahydronaphthalene              | C <sub>10</sub> H <sub>12</sub>                 | 000119-64-2 | techn. pure   | Xi          |                      | 3/4  | 4/4  | 1/0 | 4/4 | 1/0  | (4) | 1/0 | 4/4 | 4/4 | 4/4                | 4/4      | 0/0       | 0/0            | (1)          | 1/0 | 1/0          | 4/4  | 1/0  | 4/4       | 0/0         | 1/1     | 1/1                  | 1/1                  | 0/0 |                              |                                                                                                                                                                   |                                    |
| Thiocyanic acid, ammonium salt     | -> see: Ammonium thiocyanate                    |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |                      |                      |     |                              |                                                                                                                                                                   |                                    |
| Thioglycolic acid                  | C <sub>2</sub> H <sub>4</sub> SO <sub>2</sub>   | 000068-11-1 |               | T, C        |                      | 0/0  | 1/1  | (3) | (3) | 0/0  | 0/0 | (3) | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | (3)  | (3)  | (3)       | (4)         | 0/0     | 3/4                  | 0/0                  | 1/1 | 0/0                          |                                                                                                                                                                   |                                    |
| Thionyl chloride                   | Cl <sub>2</sub> SO                              | 007719-09-7 | techn. pure   | C           |                      | 4/4  | 4/4  | 4/4 | 4/4 | 0/0  | 4/4 | 2/0 | 4/4 | 4/4 | 4/4                | 4/4      | 4/4       | 4/4            | 1/1          | 1/1 | 1/0          | (3)  | 3/0  | 1/0       | 4/4         | 0/0     | 3/4                  | 0/0                  | 0/0 | 0/0                          |                                                                                                                                                                   |                                    |
| Thiophene                          | C <sub>2</sub> H <sub>4</sub> S                 | 000110-02-1 |               | F, Xn       | X                    | 3/3  | 3/3  | (2) | 4/4 | 0/0  | (4) | (2) | 3/4 | 4/4 | 0/0                | 0/0      | 0/0       | 4/4            | 0/0          | (1) | (1)          | (3)  | 4/4  | 4/4       | 3/0         | 0/0     | (1)                  | (1)                  | (1) | 0/0                          |                                                                                                                                                                   |                                    |
| Thymol                             | C <sub>10</sub> H <sub>14</sub> O               | 000089-83-8 |               | C, Xn       |                      | 0/0  | 0/0  | (3) | (3) | 0/0  | 0/0 | (3) | (3) | 3/4 | 0/0                | 0/0      | 0/0       | 4/4            | 0/0          | (1) | (1)          | (2)  | (4)  | 1/0       | 4/4         | 0/0     | (1)                  | (1)                  | (1) |                              |                                                                                                                                                                   |                                    |
| Titanium (tetra)chloride           | TiCl <sub>4</sub>                               | 007550-45-0 |               | C           |                      | 0/0  | 0/0  | 4/4 | (3) | 0/0  | 0/0 | (3) | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 4/4            | 0/0          | (1) | (1)          | (3)  | 4/4  | (3)       | 4/4         | 0/0     | (4)                  | 0/0                  | 0/0 |                              |                                                                                                                                                                   |                                    |
| Toluene                            | ->see: Methylbenzene                            |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |                      |                      |     |                              |                                                                                                                                                                   |                                    |
| Train oil                          | —                                               | —           |               | —           |                      | 0/0  | 0/0  | 1/0 | (2) | 1/0  | 0/0 | (1) | (2) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (1)  | 3/4  | 1/0       | 1/0         | 0/0     | (1)                  | (1)                  | (1) |                              |                                                                                                                                                                   |                                    |
| Transformer oil                    | —                                               | —           |               | ?           |                      | 1/3  | 3/3  | 1/0 | (3) | 1/1  | 1/0 | 3/3 | 1/3 | 1/3 | 1/0                | 1/0      | 0/0       | 1/3            | 0/0          | (1) | 1/1          | (3)  | 4/4  | 2/3       | 3/3         | 0/0     | 1/1                  | (1)                  | (1) | 0/0                          |                                                                                                                                                                   |                                    |
| Triacetin                          | C <sub>9</sub> H <sub>14</sub> O <sub>6</sub>   | 000102-76-1 |               | Xn          |                      | 0/0  | 0/0  | 0/0 | (3) | 0/0  | 0/0 | (2) | (2) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 1/0  | 4/4       | 3/3         | 0/0     | (1)                  | (1)                  | (1) |                              |                                                                                                                                                                   |                                    |
| Tribromomethane                    | CHBr <sub>3</sub>                               | 000075-25-2 |               | T           |                      | 4/4  | 4/4  | 4/4 | 4/4 | 4/4  | (4) | 4/4 | 4/4 | 4/4 | 4/4                | 4/4      | 0/0       | 2/3            | 1/1          | (1) | (2)          | 4/4  | (4)  | 4/4       | 0/0         | (3)     | 0/0                  | 0/0                  | 0/0 | 0/0                          |                                                                                                                                                                   |                                    |
| Tributyl citrate (TBC)             | C <sub>18</sub> H <sub>32</sub> O <sub>7</sub>  | 000077-94-1 |               | —           |                      | 1/2  | 2/3  | (2) | 4/4 | 0/0  | 2/3 | (2) | 2/3 | 4/4 | 3/3                | 3/4      | 0/0       | 0/0            | 1/2          | 1/1 | (1)          | (2)  | (3)  | (3)       | (3)         | 0/0     | (1)                  | (1)                  | (1) |                              |                                                                                                                                                                   |                                    |
| Tributyl phosphate (TBP)           | C <sub>12</sub> H <sub>27</sub> PO <sub>4</sub> | 000126-73-8 | techn. pure   | Xn          |                      | 1/1  | 1/1  | 1/0 | (3) | 0/0  | 0/0 | (2) | 1/3 | 0/0 | 0/0                | 4/4      | 4/4       | 0/0            | 0/0          | (1) | 1/1          | 1/0  | 3/0  | 4/4       | 4/4         | 0/0     | (1)                  | (1)                  | (1) | 1/1                          |                                                                                                                                                                   |                                    |
| Trichloroacetaldehyde              | C <sub>2</sub> HCl <sub>3</sub> O               | 000075-87-6 | 100 %         | T/Xi        |                      | 1/1  | 1/1  | 4/4 | (3) | (4)  | 0/0 | (3) | 1/1 | 0/0 | 0/0                | 4/4      | 4/4       | 0/0            | 0/0          | (1) | 0/0          | (4)  | 3/0  | (4)       | 4/4         | 0/0     | 4/4                  | 0/0                  | 0/0 | 0/0                          |                                                                                                                                                                   |                                    |
| Trichloroacetic acid (TCA)         | C <sub>2</sub> HCl <sub>3</sub> O <sub>2</sub>  | 000076-03-9 |               | C+          |                      | 1/4  | 3/4  | 4/4 | 4/4 | 4/4  | 0/0 | 4/4 | 1/1 | 4/4 | 0/0                | 4/4      | 4/4       | 0/0            | 1/0          | 1/1 | 1/4          | 3/0  | 4/4  | 4/4       | 0/0         | 1/3     | 3/0L                 | 2/0L                 | 1/1 |                              |                                                                                                                                                                   |                                    |
| Trichlorobenzene                   | C <sub>6</sub> H <sub>3</sub> Cl <sub>3</sub>   | —           | 100 %         | (Xn)        |                      | 4/4  | 4/4  | (3) | (3) | 0/0  | (4) | (2) | 4/4 | 4/4 | 0/0                | 4/4      | 4/4       | 4/4            | 0/0          | (1) | (2)          | (3)  | (4)  | (3)       | 4/4         | 0/0     | (2)                  | 0/0                  | 0/0 | 0/0                          | isomer not indicated in the source                                                                                                                                |                                    |
| Trichloroethane                    | C <sub>2</sub> H <sub>2</sub> Cl <sub>3</sub>   | —           |               | Xn          |                      | 3/4  | 4/4  | 3/0 | 4/4 | 4/4  | 4/4 | (2) | 4/4 | 4/4 | 4/4                | 4/4      | 4/4       | 4/4            | 1/2          | 1/1 | (1)          | 1/3  | 4/4  | 1/0       | 4/4         | 0/0     | 4/4                  | 0/0                  | 0/0 | 0/0                          | isomer not indicated in the source                                                                                                                                |                                    |
| Trichloroethylene (TRI)            | C <sub>2</sub> HCl <sub>3</sub>                 | 000079-01-6 | 100 %         | Xn          |                      | 3/4  | 4/4  | 3/0 | 4/4 | 4/4  | 4/4 | 4/4 | 4/4 | 4/4 | 4/4                | 4/4      | 0/4       | 1/2            | 1/1          | 1/0 | 1/1          | 4/4  | 1/3  | 4/4       | 0/0         | 1/3     | (1/1L) <sup>1)</sup> | (1/1L) <sup>1)</sup> | 1/0 |                              | <sup>1)</sup> Water-free! If even traces of hydrochloric acid (HCl) are split off by moisture, there is a risk of pitting, crevice and stress corrosion cracking. |                                    |
| Trichlorofluoromethane             | CCl <sub>3</sub> F                              | 000075-69-4 |               | N           |                      | 0/0  | 0/0  | 1/0 | (3) | 0/0  | 0/0 | 1/0 | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (3) | (1)          | 0/0  | 4/4  | 2/0       | 1/0         | 0/0     | (3)                  | 0/0                  | 0/0 | 0/0                          |                                                                                                                                                                   |                                    |
| Trichlorophenol                    | C <sub>6</sub> H <sub>3</sub> Cl <sub>3</sub> O | —           |               | (Xn, Xi)    |                      | 0/0  | 0/0  | (3) | (4) | 0/0  | 0/0 | (3) | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 4/4            | 0/0          | (1) | (1)          | (3)  | (4)  | (3)       | (4)         | 0/0     | (3)                  | 0/0                  | 0/0 |                              | isomer not indicated in the source                                                                                                                                |                                    |
| Trichlorotrifluoroethane           | C <sub>2</sub> Cl <sub>3</sub> F <sub>3</sub>   | 000076-13-1 |               | ?           |                      | 0/0  | 0/0  | 1/0 | (3) | 1/0  | 0/0 | 1/0 | (3) | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/0          | 4/4  | 3/0  | 1/0       | 0/0         | (3)     | 0/0                  | 0/0                  |     |                              |                                                                                                                                                                   |                                    |
| Trichlorotrifluoroethane           | C <sub>2</sub> Cl <sub>3</sub> F <sub>3</sub>   | —           | 100 %         | ?           |                      | 4/4  | 3/4  | 1/0 | 3/0 | 0/0  | 0/0 | 1/0 | 4/4 | 4/4 | 1/0                | 3/4      | 4/4       | 3/3            | 0/0          | 0/0 | (1)          | 1/0  | 4/4  | 3/0       | 1/0         | 0/0     | (3)                  | 0/0                  | 0/0 |                              | isomer not indicated in the source                                                                                                                                |                                    |
| Tricresyl phosphate (TCF)          | C <sub>21</sub> H <sub>21</sub> PO <sub>4</sub> | —           | techn. pure   | T/Xn, N     |                      | 1/1  | 1/1  | 1/0 | 4/4 | 1/0  | 0/0 | 1/0 | 1/3 | 4/4 | 0/0                | 4/4      | 4/4       | 0/0            | (1)          | 1/1 | (3)          | 3/0  | 3/4  | 4/4       | 0/0         | 1/1     | 1/1                  | 1/1                  | 1/1 | 1/1                          |                                                                                                                                                                   | isomer not indicated in the source |
| Triethanolamine (TEA)              | C <sub>6</sub> H <sub>15</sub> NO <sub>3</sub>  | 000102-71-6 | techn. pure   | Xi          |                      | 1/1  | 1/2  | (2) | (2) | 1/0  | 0/0 | 2/2 | 1/1 | 1/1 | 0/0                | 3/0      | 4/4       | 1/1            | 0/0          | 1/1 | 1/0          | 1/0  | 2/0  | 4/4       | 4/4         | 0/0     | (1)                  | (1)                  | (1) | 0/0                          |                                                                                                                                                                   |                                    |
| Triethylamine (TEA)                | C <sub>6</sub> H <sub>15</sub> N                | 000121-44-8 | techn. pure   | F, C, Xn    | X                    | 0/0  | 0/0  | (2) | (3) | 0/0  | 0/0 | 1/1 | 4/4 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | (1)          | (1) | 3/4          | 4/4  | 3/0  | 3/4       | 0/0         | (1)     | (1)                  | (1)                  | (1) | 0/0                          |                                                                                                                                                                   |                                    |
| Triethylene glycol                 | C <sub>6</sub> H <sub>14</sub> O <sub>4</sub>   | 000112-27-6 |               | Xi          |                      | 1/1  | 1/1  | (3) | 1/2 | 0/0  | 1/1 | 1/0 | 1/1 | 1/2 | 1/1                | 2/3      | 0/0       | 1/1            | 1/1          | 1/1 | (1)          | (2)  | (2)  | (1)       | (3)         | 0/0     | (1)                  | (1)                  | (1) | 0/0                          |                                                                                                                                                                   |                                    |
| Triethylene glycol diacetate       | C <sub>10</sub> H <sub>18</sub> O <sub>6</sub>  | 000111-21-7 |               | ?           |                      | 0/0  | 0/0  | (3) | (3) | 0/0  | 0/0 | 1/0 | (2) | 0/0 | 0/0                | 0/0      | 0/0       | 4/4            | 0/0          | (1) | (1)          | (3)  | (3)  | (4)       | (4)         | 0/0     | (1)                  | (1)                  | (1) |                              |                                                                                                                                                                   |                                    |
| Trihydroxypropane, 1,2,3-          | -> see: Glycerol                                |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |                      |                      |     |                              |                                                                                                                                                                   |                                    |
| Triiodomethane                     | -> see: Iodoform                                |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |                      |                      |     |                              |                                                                                                                                                                   |                                    |
| Triisopropylbenzene                | C <sub>13</sub> H <sub>24</sub>                 | 000717-74-8 |               | —           |                      | 0/0  | 0/0  | (2) | (3) | 0/0  | (4) | (2) | (3) | 4/4 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 4/4  | 1/0       | 1/0         | 0/0     | 1/1                  | (1)                  | (1) |                              |                                                                                                                                                                   |                                    |
| Trimethylbenzene, 1,2,4-           | C <sub>9</sub> H <sub>12</sub>                  | 000095-63-6 |               | Xn          | X                    | 0/0  | 0/0  | (1) | (4) | 0/0  | 0/0 | (2) | 3/3 | 4/4 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | (1)          | (2)  | 4/4  | (2)       | 4/4         | 0/0     | 1/1                  | 1/1                  | 1/1 | 0/0                          |                                                                                                                                                                   |                                    |
| Trimethylolpropane                 | C <sub>8</sub> H <sub>14</sub> O <sub>3</sub>   | 000077-99-6 | aqueous       | —           |                      | 0/0  | 0/0  | (2) | (2) | (2)  | 0/0 | 1/0 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | 1/1 | (1)          | (1)  | (2)  | (2)       | 0/0         | (1)     | (1)                  | (1)                  |     |                              |                                                                                                                                                                   |                                    |
| Trimethylpentane, 2,2,4-           | C <sub>8</sub> H <sub>18</sub>                  | 000540-84-1 | techn. pure   | F, Xn       | X                    | 1/3  | 1/3  | 1/0 | (2) | 1/0  | (4) | 1/0 | 1/3 | 3/4 | 1/0                | 1/0      | 4/4       | 1/1            | 0/0          | (1) | 1/1          | 1/1  | 4/4  | 1/0       | 1/0         | 0/0     | 1/1                  | 1/1                  | 1/1 | 0/0                          | Iso-octane; Isobutyltrimethylmethane                                                                                                                              |                                    |
| Trioctyl phosphate                 | C <sub>24</sub> H <sub>54</sub> PO <sub>4</sub> | 000078-42-2 | techn. pure   | (Xn)        |                      | 3/0  | 1/0  | 1/0 | (3) | 0/0  | 0/0 | (2) | 1/3 | 0/0 | 0/0                | 4/4      | 0/0       | 0/0            | (1)          | 1/1 | (3)          | 3/0  | 3/4  | 4/4       | 0/0         | (1)     | (1)                  | (1)                  | 0/0 | Tris(2-ethylhexyl) phosphate |                                                                                                                                                                   |                                    |
| Tripropylene glycol (TPG)          | C <sub>9</sub> H <sub>20</sub> O <sub>4</sub>   | 024800-44-0 |               | (—)         |                      | 1/1  | 1/1  | (3) | 1/2 | 0/0  | 1/1 | 1/0 | 1/1 | 1/1 | 1/1                | 2/3      | 0/0       | 0/0            | 1/1          | 1/1 | (2)          | (3)  | (2)  | (3)       | 0/0         | (1)     | (1)                  | (1)                  |     |                              |                                                                                                                                                                   |                                    |
| Trisodium phosphate                | Na <sub>3</sub> PO <sub>4</sub>                 | 007601-54-9 |               | Xi          |                      | 1/1  | 1/1  | 1/0 | (2) | (2)  | 0/0 | 1/0 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | (4)                  | 1/1                  | 1/1 |                              |                                                                                                                                                                   |                                    |
| Turbine oil (based on mineral oil) | —                                               | —           |               | ?           |                      | 0/0  | 0/0  | (1) | (2) | 1/0  | 0/0 | (2) | 1/3 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 0/0          | (1) | 1/1          | 1/1  | 4/4  | (2)       | 1/0         | 0/0     | 1/1                  | 1/1                  | 1/1 |                              |                                                                                                                                                                   |                                    |
| Turpentine surrogate               | —                                               | —           |               | Xn, N       | X                    | 0/0  | 0/0  | 1/0 | (3) | 1/0  | (4) | 1/0 | (3) | 4/4 | 0/0                | 0/0      | 0/0       | 1/3            | 0/0          | (1) | 1/1          | (1)  | 4/4  | 1/1       | (3)         | 0/0     | 1/1                  | 1/1                  | 1/1 | 1/1                          |                                                                                                                                                                   |                                    |
| Two-stroke oil                     | —                                               | —           | 100 %         | —           |                      | 0/0  | 1/3  | 1/0 | (2) | 1/0  | 0/0 | 1/1 | 1/3 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | (1)          | 1/1 | 1/1          | 4/4  | 1/0  | 1/0       | 0/0         | 1/1     | 1/1                  | 1/1                  | 1/1 |                              |                                                                                                                                                                   |                                    |
| Undecanol                          | C <sub>11</sub> H <sub>24</sub> O               | 000112-42-5 |               | Xi          |                      | 1/2  | 1/3  | (1) | 2/3 | (1)  | 1/2 | 1/0 | 1/2 | 2/2 | 3/3                | 1/3      | 0/0       | 1/1            | 1/2          | 1/1 | 1/1          | (1)  | (3)  | (1)       | (2)         | 0/0     | (1)                  | (1)                  | (1) |                              |                                                                                                                                                                   |                                    |
| Urea                               | CH <sub>4</sub> N <sub>2</sub> O                | 000057-13-6 | aqueous       | Xi          |                      | 1/1  | 1/1  | 1/0 | 1/1 | 1/0  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0                | 0/0      | 0/0       | 0/0            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 1/1                  | 1/0                  | 1/0 | 1/1                          |                                                                                                                                                                   |                                    |
| Urea                               | CH <sub>4</sub> N <sub>2</sub> O                | 000057-13-6 |               | Xi          |                      | 1/1  | 1/1  | 1/0 | 1/1 | 1/0  | 1/2 | 1/1 | 1/1 | 1/2 | 3/3                | 2/4      | 3/3       | 1/1            | 1/1          | 1/1 | 1/1          | 1/1  | 1/0  | 1/1       | 1/1         | 0/0     | 1/1                  | 1/0                  | 1/0 | 1/1                          |                                                                                                                                                                   |                                    |
| Uric acid                          | C <sub>5</sub> H <sub>4</sub> N                 |             |               |             |                      |      |      |     |     |      |     |     |     |     |                    |          |           |                |              |     |              |      |      |           |             |         |                      |                      |     |                              |                                                                                                                                                                   |                                    |



| CHEMICALS             | FORMULA                                          | CAS-NR.     | CONCENTRATION | HAZARD NOTE | FLAMMABLE | thermoplastics ----- |      |     |     |      |     |     |     |     |     |          |           |     |              | fluoroplastics --- |      |      | elastomers --- |           |     | metals ----- |     |      |      | Hastelloy C | COMMENT                                        |                                                |
|-----------------------|--------------------------------------------------|-------------|---------------|-------------|-----------|----------------------|------|-----|-----|------|-----|-----|-----|-----|-----|----------|-----------|-----|--------------|--------------------|------|------|----------------|-----------|-----|--------------|-----|------|------|-------------|------------------------------------------------|------------------------------------------------|
|                       |                                                  |             |               |             |           | HDPE                 | LDPE | PA  | PC  | PETG | PMP | POM | PP  | PS  | PSU | PVC HART | PVC WEICH | SAN | ECTFE / ETFE | FEP                | PTFE | PVDF | EPDM           | FPM / FKM | NBR | SI           | AL  | V2A  | V4A  |             |                                                |                                                |
| Vinylidene chloride   | C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>    | 000075-35-4 |               | F+, Xn      | X         | 4/4                  | 4/4  | (2) | 4/4 | 4/4  | 4/4 | 4/4 | 4/4 | 4/4 | 4/4 | 4/4      | 4/4       | 0/0 | 2/3          | 1/1                | (1)  | (2)  | 4/4            | 3/0       | 4/4 | 0/0          | (3) | 0/0  | 0/0  | 0/0         |                                                |                                                |
| Vitamin C             | C <sub>6</sub> H <sub>8</sub> O <sub>6</sub>     | 000050-81-7 | liquid        | —           | —         | 1/1                  | 1/1  | (2) | (2) | (1)  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 1/1 | 1/1          | 1/1                | 1/1  | (1)  | (1)            | (1)       | 0/0 | 1/1          | (1) |      |      |             |                                                |                                                |
| Walnut oil            | —                                                | 008024-09-7 |               | —           | —         | 0/0                  | 0/0  | (2) | (2) | 1/0  | 0/0 |     | 1/3 | 3/3 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | (3)            | (1)       | (2) | 0/0          | (1) | 1/1  | 1/1  |             |                                                |                                                |
| Washingup liquid      | —                                                | —           | aqueous       | ?           | —         | 1/1                  | 1/1  | (2) | (2) | 1/0  | 0/0 | 1/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | (1)  | (2)            | (2)       | (2) | 0/0          | (3) | (1)  | (1)  | 0/0         |                                                |                                                |
| Water                 | H <sub>2</sub> O                                 | 007732-18-5 |               | —           | —         | 1/1                  | 1/1  | 1/0 | 1/1 | 1/1  | 1/0 | 1/1 | 1/1 | 1/1 | 1/0 | 1/3      | 1/3       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 1/1            | 1/1       | 1/1 | 0/0          | 1/1 | 1/1  | 1/1  | 1/1         |                                                |                                                |
| Water, distilled ~    | H <sub>2</sub> O                                 | 007732-18-5 |               | —           | —         | 1/1                  | 1/1  | 1/0 | 1/1 | 1/1  | 1/0 | 1/1 | 1/1 | 1/0 | 1/0 | 1/3      | 1/3       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 1/1            | 1/1       | 1/1 | 0/0          | 1/1 | 1/1  | 1/1  | 1/1         |                                                |                                                |
| Wax alcohol           | —                                                | —           | techn. pure   | (—)         | —         | 3/4                  | 3/4  | (2) | (2) | 1/0  | 0/0 |     | 3/4 | 0/0 | 0/0 | 1/1      | 3/4       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | 4/4            | 1/1       | 1/1 | 0/0          | (1) | (1)  | (1)  | 0/0         |                                                |                                                |
| Waxes                 | —                                                | —           |               | —           | —         | 0/0                  | 1/3  | 1/1 | 1/1 | 1/1  | 0/0 |     | 1/3 | 1/1 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | (1)                | 1/1  | 1/1  | (4)            | 1/0       | (1) | 0/0          | 1/1 | 1/1  | 1/1  |             |                                                |                                                |
| Wetting agent         | —                                                | —           | 5 %           | ?           | —         | 1/0                  | 0/0  | (2) | (2) | (1)  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 1/3      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | 1/1  | (2)            | (2)       | (2) | 0/0          | 0/0 | K    | K    |             | detergents                                     |                                                |
| Whey                  | —                                                | —           |               | —           | —         | 1/1                  | 0/0  | (2) | (1) | (1)  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 1/1          | 1/1                | 1/1  | (1)  | (3)            | (1)       | (2) | 0/0          | (2) | 1/1  | 1/1  |             |                                                |                                                |
| Whiskey               | —                                                | —           |               | —           | —         | 0/0                  | 0/0  | 1/0 | 1/1 | 1/1  | 0/0 | 1/2 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | 1/1  | 1/0            | 1/0       | 1/1 | 0/0          | 1/1 | 1/1  | 1/1  |             | whisky, scotch, bourbon                        |                                                |
| White Spirit          | —                                                | 008042-47-5 |               | Xn          | —         | 1/0                  | 1/0  | (1) | (3) | 1/0  | (4) | 1/0 | 1/3 | 0/0 | 0/0 | 1/0      | 0/0       | 0/0 | 0/0          | (1)                | 1/1  | (2)  | 4/4            | 1/0       | (2) | 0/0          | 1/1 | 1/1  | 1/1  |             |                                                |                                                |
| Wines                 | —                                                | —           |               | —           | —         | 1/1                  | 1/1  | 1/0 | 1/0 | 1/1  | 1/0 | (2) | 1/1 | 1/1 | 1/0 | 1/1      | 1/1       | 0/0 | 0/0          | 1/1                | 1/1  | 1/1  | 1/0            | 1/0       | 1/0 | 0/0          | (4) | 1/1  | 1/1  | 1/1         |                                                |                                                |
| Wort for fermentation | —                                                | —           |               | ?           | —         | 1/1                  | 1/1  | (2) | (2) | (1)  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 1/1          | 1/1                | 1/1  | (2)  | (1)            | 1/0       | 4/4 | 0/0          | (2) | (1)  | (1)  | 0/0         |                                                |                                                |
| Xenon                 | Xe                                               | 007440-63-3 |               | —           | —         | 0/0                  | 0/0  | 1/0 | (1) | 1/1  | 0/0 | 1/1 | (2) | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | (1)          | 1/1                | 1/1  | 1/1  | 1/0            | 1/0       | 1/0 | 0/0          | 1/1 | 1/1  | 1/1  |             |                                                |                                                |
| Xylene                | C <sub>8</sub> H <sub>10</sub>                   | 001330-20-7 |               | (F), Xn     | X         | 3/4                  | 3/4  | 1/0 | 4/4 | 0/0  | 3/4 | 1/2 | 4/4 | 4/4 | 4/4 | 4/4      | 4/4       | 4/4 | 1/2          | 1/1                | 1/0  | 1/3  | 4/4            | 1/3       | 4/4 | 0/0          | 1/1 | 1/1  | 1/1  | 1/1         |                                                |                                                |
| Yeast                 | —                                                | —           | each          | —           | —         | 1/1                  | 1/1  | 1/0 | (1) | 1/0  | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 1/0      | 1/0       | 0/0 | 1/1          | 1/1                | 1/1  | 1/1  | 1/0            | 1/0       | 1/1 | 0/0          | 1/1 | (1)  | (1)  |             |                                                |                                                |
| Zinc acetate          | C <sub>4</sub> H <sub>6</sub> ZnO <sub>4</sub>   | 000557-34-6 | aqueous       | Xn, Xi      | —         | 1/1                  | 1/1  | (2) | (2) | (2)  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | (1)  | 1/0            | (3)       | 3/3 | 0/0          | (3) | (1)  | (1)  |             |                                                |                                                |
| Zinc bromide          | ZnBr <sub>2</sub>                                | 007699-45-8 |               | C, Xn       | —         | 1/1                  | 1/1  | 4/4 | (2) | 0/0  | 0/0 | (2) | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | 1/1                | 1/1  | (1)  | (2)            | (1)       | (2) | 0/0          | (3) | 0/0  | 0/0  |             |                                                |                                                |
| Zinc carbonate        | ZnCO <sub>3</sub>                                | 003486-35-9 | saturated     | ?           | —         | 1/1                  | 1/1  | (1) | 1/1 | 1/1  | 0/0 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1      | 1/1       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 1/1            | 1/1       | 1/1 | 1/1          | (2) | (1)  | (1)  | 0/0         | small solubility - no chemical effect expected |                                                |
| Zinc chloride         | ZnCl <sub>2</sub>                                | 007646-85-7 | aqueous       | (C, Xn)     | —         | 1/1                  | 1/1  | 3/4 | (2) | 0/0  | 0/0 | 2/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | 1/1                | 1/1  | 1/1  | 1/0            | 1/1       | 1/1 | 0/0          | 3/4 | 1/4L | 1/3L | 1/1         |                                                |                                                |
| Zinc nitrate          | Zn(NO <sub>3</sub> ) <sub>2</sub>                | 007779-88-6 |               | O, C, Xn    | —         | 1/1                  | 1/1  | 1/4 | (2) | 0/0  | 0/0 | (2) | 1/1 | 1/0 | 1/0 | 1/0      | 1/0       | 1/1 | 0/0          | 1/1                | 1/1  | (1)  | 1/0            | (1)       | (2) | 0/0          | (3) | (1)  | (1)  | 0/0         |                                                |                                                |
| Zinc oxide            | ZnO                                              | 001314-13-2 | solid         | Xn, Xi      | —         | 1/1                  | 1/1  | 1/1 | 1/1 | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1      | 1/1       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 1/1            | 1/1       | 1/1 | 1/1          | (2) | 1/1  | 1/1  | 1/1         |                                                | small solubility - no chemical effect expected |
| Zinc oxide ointment   | —                                                | —           |               | ?           | —         | 0/0                  | 0/0  | (1) | (2) | (2)  | 0/0 | (2) | (2) | 1/1 | 0/0 | 0/0      | 0/0       | 1/1 | 0/0          | (1)                | 1/1  | (2)  | (4)            | (2)       | (2) | 0/0          | (2) | (1)  | (1)  |             |                                                |                                                |
| Zinc phosphate        | Zn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>  | 007779-90-0 | saturated     | ?           | —         | 1/1                  | 1/1  | (1) | 1/1 | 1/1  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1      | 1/1       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 1/1            | 1/1       | 1/1 | 1/1          | (2) | (1)  | (1)  | 0/0         |                                                |                                                |
| Zinc sludge           | —                                                | —           |               | ?           | —         | 0/0                  | 0/0  | 0/0 | 0/0 | 0/0  | 0/0 | 0/0 | 1/1 | 0/0 | 0/0 | 0/0      | 0/0       | 0/0 | 0/0          | (1)                | (2)  | 0/0  | 0/0            | 0/0       | 0/0 | (3)          | 0/0 | 0/0  |      |             |                                                |                                                |
| Zinc stearate         | C <sub>36</sub> H <sub>70</sub> ZnO <sub>4</sub> | 000557-05-1 |               | Xi          | —         | 1/1                  | 1/1  | (1) | 1/1 | 0/0  | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/2      | 1/1       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | (2)            | 1/1       | (2) | 0/0          | (2) | (1)  | (1)  |             |                                                |                                                |
| Zinc sulfate          | ZnSO <sub>4</sub>                                | 007733-02-0 | 10 %          | —           | —         | 1/1                  | 1/1  | (3) | 1/0 | (2)  | 1/0 | 2/0 | 1/1 | 1/1 | 0/0 | 1/1      | 1/0       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 1/1            | 1/0       | 1/1 | 0/0          | 3/4 | 1/1  | 1/1  | 1/1         |                                                |                                                |
| Zinkchlorid           | ZnCl <sub>2</sub>                                | 007646-85-7 | 10 %          | C, Xn       | —         | 1/1                  | 1/1  | 3/4 | 1/0 | 0/0  | 1/1 | 2/0 | 1/1 | 1/3 | 0/0 | 1/3      | 1/0       | 1/1 | 1/1          | 1/1                | 1/1  | 1/1  | 1/1            | 1/0       | 1/1 | 0/0          | 3/4 | 1/4L | 1/3L | 1/1         |                                                |                                                |

## Chemical resistance

Two values are given per substance  
left number = value at +20°C / right number = value at +50°C.

|     |                                                |
|-----|------------------------------------------------|
| 0   | no data available                              |
| 1   | resistant                                      |
| 2   | practically resistant                          |
| 3   | partially resistant                            |
| 4   | not resistant                                  |
| K   | no general information available               |
| L   | danger of pitting or stress-cracking corrosion |
| ( ) | estimated value                                |

## Hazard notes

|    |                               |
|----|-------------------------------|
| E  | explosive                     |
| O  | oxidizing                     |
| F  | highly flammable              |
| F+ | extremely flammable           |
| T  | toxic                         |
| T+ | very toxic                    |
| C  | corrosive                     |
| Xn | harmful                       |
| Xi | irritant                      |
| N  | dangerous for the environment |

## Description of the materials

### Thermoplastics

|      |                                                   |
|------|---------------------------------------------------|
| HDPE | Polyethylene (high density)                       |
| LDPE | Polyethylene (low density)                        |
| PA   | Polyamide (Nylon)                                 |
| PC   | Polycarbonate                                     |
| PETG | Polyethylene terephthalate glycol (PET copolymer) |
| PMP  | Polymethylpentene (TPX)                           |
| POM  | Polyoxymethylene, polyacetal                      |
| PP   | Polypropylene                                     |
| PS   | Polystyrene                                       |
| PSU  | Polysulfone                                       |
| PVC  | Polyvinyl chloride                                |
| SAN  | Styrene-acrylnitrile                              |

### Fluoroplastics

|        |                                                      |
|--------|------------------------------------------------------|
| E-CTFE | Ethylene-chlorotrifluoroethylene (Halar )            |
| ETFE   | Ethylene-tetrafluoroethylene                         |
| FEP    | Tetrafluoroethylene-perfluoropropylene (Teflon, FEP) |
| PTFE   | Polytetrafluoroethylene (Teflon)                     |
| PVDF   | Polyvinylidene fluoride                              |

### Elastomers

|         |                                 |
|---------|---------------------------------|
| EPDM    | Ethylene-propylene-diene rubber |
| FPM/FKM | Fluorinated rubber (Viton)      |
| NBR     | Acryl-nitrile-butadiene rubber  |
| SI      | Silicone rubber                 |

### Metals

|             |                                   |
|-------------|-----------------------------------|
| Al          | Aluminium                         |
| V2A         | Stainless steel 1.4301 (AISI 304) |
| V4A         | Stainless steel 1.4401 (AISI 316) |
| Hastelloy C | Nickel-chromium-molybdenum alloy  |