薬品名 濃度%	CAS #	透過時間 (分)	Permeation level	Standard	Degradatio level	Rating
トリクロロエタン99%	71-55-6	276	5	ASTM F739	1	¥
トリクロロトリフルオロエタン99%	76-13-1	480	6	ASTM F739	4	++
1, 1, 2, 2-テトラクロロエタン98%	79-34-5	59	2	ASTM F739	1	
1, 2-ジクロロエタン99%	107-06-2	18	1	ASTM F739	1	T T
1, 3-ジクロロベンゼン98%	541-73-1	73	3	ASTM F739	1	
2-ブトキシエタノール99%	111-76-2	480	6	ASTM F739	4	++
エチレングリコールモノエチルエーテル99%	110-80-5	416	5	ASTM F739	4	++
酢酸2-エトキシエチル(別名エチレングリコー ルモノエチルエーテルアセテート)99%	111-15-9	162	4	ASTM F739	3	++
イソプロピルアルコール99%	67-63-0	480	6	ASTM F739	4	++
2, 2, 2ートリフルオロエタノcール99%	75-89-8	43	2	ASTM F739	1	
酢酸10%	64-19-7	480	6	ASTM F739	4	++
酢酸50%	64-19-7	480	6	ASTM F739	4	++
酢酸99%	64-19-7	118	3	ASTM F739	NT	NA
アセトン99%	67-64-1	NT	NT		1	NA
アクリロニトリル99%	107-13-1	12	1	ASTM F739	1	9
水酸化アンモニウム水25%	1336-21-6	480	6	EN 16523-1:2015	4	++
水酸化アンモニウム水29%	1336-21-6	480	6	ASTM F739	4	++
アニリン99%	62-53-3	72	3	ASTM F739	1	
ベンゼン99%	71-43-2	27	1	ASTM F739	1	-
酢酸ブチル99%	123-86-4	164	4	ASTM F739	1	
二硫化炭素99%	75-15-0	20	1	ASTM F739	2	=
四塩化炭素(テトラクロロメタン)99%	56-23-5	341	5	ASTM F739	3	++
クロロベンゼン99%	108-90-7	42	2	ASTM F739	NT	NA
クロム酸50%	7738-94-5	175	4	ASTM F739	4	++
クメン98%	98-82-8	271	5	ASTM F739	3	++

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for high chemical exposure or chemical immersion, limited to breakthrough time based on a working day.
- Used for repeated chemical contact, limited to total chemical exposure i.e.: accumulative breakthrough time based on a working day.
- Splash protection only, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
 Not recommended, these gloves are deemed unsuitable for work with this chemical.
- NT: Not tested
- NA: "Not applicable" because not fully tested (only degradation OR permeation results)



薬品名 濃度%	CAS#	透過時間 (分)	Permeation level	Standard	Degradati level	o Rating
シクロヘキサン99%	110-82-7	480	6	ASTM F739	4	++
ジエタノールアミン97%	111-42-2	480	6	ASTM F739	4	++
ジエチルアミン98%	109-89-7	53	2	EN 16523-1:2015	1	-
N, N-ジメチルホルムアミド99%	68-12-2	35	2	ASTM F739	NT	NA
ジメチルスルホキシド99%	67-68-5	480	6	ASTM F739	3	++
エピクロロヒドリン99%	106-89-8	4	0	ASTM F739	NT	NA
エタノール95%	64-17-5	480	6	ASTM F739	4	++
ジエチルエーテル99%	60-29-7	64	3	ASTM F739	4	++
酢酸エチル99%	141-78-6	27	1	EN 16523-1:2015	NT	NA
エチレングリコール99%	107-21-1	480	6	ASTM F739	4	++
エチレンオキシド100%	75-21-8	32	2	ASTM F739	NT	NA
ホルムアルデヒド37%	50-00-0	480	6	ASTM F739	4	++
ジクロロジフルオロメタン99%	75-71-8	480	6	ASTM F739	NT	NA
石油留分又は残油の水素化精製又は分解によ り得られる軽油	68476-34-6	480	6	ASTM F739	NT	NA
フルフラール99%	98-01-1	61	3	ASTM F739	NT	NA
- ヒドラジン35%	302-01-2	480	6	ASTM F739	4	++
ヒドラジン70%	302-01-2	480	6	ASTM F739	4	++
塩酸10%	7647-01-0	480	6	ASTM F739	4	++
塩酸35%	7647-01-0	480	6	EN 374-3:2003	4	++
塩酸37%	7647-01-0	480	6	ASTM F739	4	++
塩酸50%	7647-01-0	NT	NT		4	N.A.
フッ化水素10%	7664-39-3	NT	NT		4	NA
フッ化水素49%	7664-39-3	134	4	ASTM F739	4	++
過酸化水素30%	7722-84-1	480	6	EN 16523-1:2015	4	++
イソブチルアルコール99%	78-83-1	480	6	ASTM F739	4	++
石油留分又は残油の水素化精製, 改質又は分 解により得られる灯油	8008-20-6	480	6	ASTM F739	4	++

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for high chemical exposure or chemical immersion, limited to breakthrough time based on a working day.
- Used for repeated chemical contact, limited to total chemical exposure i.e.: accumulative breakthrough time based on a working day.
- Splash protection only, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- Not recommended, these gloves are deemed unsuitable for work with this chemical.
- NT: Not tested
- NA: "Not applicable" because not fully tested (only degradation OR permeation results)



薬品名 濃度%	CAS#	透過時間(分)	Permeation level	Standard	Degradatio level	Rating
クレゾール97%	108-39-4	A-11	4	ASTM F739	2	+
メタノール99%	67-56-1	148	4	ASTM F739	3	++
メチルイソブチルケトン99%	108-10-1	57	2	ASTM F739	NT	NA
ヘプタン99%	142-82-5	480	6	ASTM F739	4	++
n – ヘキサン95%	110-54-3	480	6	ASTM F739	4	++
N-メチル-2-ピロリドン99%	872-50-4	108	3	ASTM F739	NT	NA
N, N-ジメチルアセトアミド30%	127-19-5	480	6	ASTM F739	NT	NA
N, N‐ジメチルアセトアミド99%	127-19-5	39	2	ASTM F739	1	4
石油ベンジン	8030-30-6	480	6	ASTM F739	4	++
ストッダード溶剤 (石油)	8052-41-3	480	6	ASTM F739	4	++
重質ナフサ	68551-17-7	NT	NT		4	NA
石油エーテル	8032-32-4	480	6	ASTM F739	4	++
硝酸50%	7697-37-2	341	5	ASTM F739	3	++
硝酸70%	7697-37-2	49	2	ASTM F739	NT	NA
ニトロベンゼン99%	98-95-3	45	2	ASTM F739	1	-
オレイン酸90%	112-80-1	NT	NT		4	NA
フェノール85%	108-95-2	255	5	ASTM F739	3	++
リン酸75%	7664-38-2	480	6	ASTM F739	4	++
リン酸85%	7664-38-2	480	6	ASTM F739	4	++
塩素化ビフェニル	11097-69-1	343	5	ASTM F739	NT	NA
水酸化カリウム50%	1310-58-3	480	6	ASTM F739	4	++
ピリジン99%	110-86-1	26	1	ASTM F739	1	*
水酸化ナトリウム20%	1310-73-2	480	6	ASTM F739	4	++
水酸化ナトリウム40%	1310-73-2	480	6	ASTM F739	4	++
水酸化ナトリウム50%	1310-73-2	480	6	ASTM F739	4	++

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for high chemical exposure or chemical immersion, limited to breakthrough time based on a working day.
- Used for repeated chemical contact, limited to total chemical exposure i.e.: accumulative breakthrough time based on a working day.
- Splash protection only, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- Not recommended, these gloves are deemed unsuitable for work with this chemical.
- NT: Not tested
- NA: "Not applicable" because not fully tested (only degradation OR permeation results)



薬品名 濃度%	CAS#	透過時間 (分)	Permeation level	Standard	Degradatio level	Rating
スチレン99%	100-42-5	36	2	EN 16523-1:2015	1	¥
硫酸10%	7664-93-9	480	6	ASTM F739	4	++
硫酸40%	7664-93-9	480	6	ASTM F739	4	++
硫酸50%	7664-93-9	480	6	ASTM F739	4	++
硫酸96%	7664-93-9	243	5	EN 16523-1:2015	NT	NA
t e r t -ブチル=メチル=エ - テル98%	1634-04-4	480	6	ASTM F739	NT	NA
2-メチル-2-メトキシブタン96%	994-05-8	480	6	ASTM F739	NT	NA
テトラクロルエチレン99%	127-18-4	480	6	ASTM F739	4	++
テトラヒドロフラン99%	109-99-9	17	1	ASTM F739	1	
トルエン99%	108-88-3	28	1	ASTM F739	1	
ジイソシアン酸トリレン80%	584-84-9	480	6	ASTM F739	2	+
トリクロロエチレン99%	79-01-6	9	0	ASTM F739	1	
トリエタノールアミン98%	102-71-6	480	6	ASTM F739	4	++
テレビン油	8006-64-2	480	6	ASTM F739	4	++
ガソリン	8006-61-9	480	6	ASTM F739	4	++
酢酸ビニル99%	108-05-4	30	1	ASTM F739	2	=
キシレン99%	1330-20-7	92	3	ASTM F739	2	+

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for high chemical exposure or chemical immersion, limited to breakthrough time based on a working day.
- Used for repeated chemical contact, limited to total chemical exposure i.e.: accumulative breakthrough time based on a working day.
- Splash protection only, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
 Not recommended, these gloves are deemed unsuitable for work with this chemical.
- NT: Not tested
- NA: "Not applicable" because not fully tested (only degradation OR permeation results)



Chemical Product	CAS#	Breakthrough time (minutes)	Permeation level	Standard	Degradatio level	Rating
1,1,1-Trichloroethane 99%	71-55-6	276	5	ASTM F739	1	÷
1,1,2-Trichlorotrifluoroethane (Freon TF or Freon 113) 99%	76-13-1	480	6	ASTM F739	4	++
1,1,2,2-Tetrachloroethane 98%	79-34-5	59	2	ASTM F739	1	
1,2 - dichloroethane 99%	107-06-2	18	1	ASTM F739	1	-
1,3 - Dichlorobenzene 98%	541-73-1	73	3	ASTM F739	1	*
2-Butoxyethanol (Butyl Cellusolve) 99%	111-76-2	480	6	ASTM F739	4	++
2-Ethoxyethanol (Cellosolve) 99%	110-80-5	416	5	ASTM F739	4	++
2-Ethoxyethyl acetate (Cellosolve Acetate) 99%	111-15-9	162	4	ASTM F739	3	++
2-Propanol (Isopropanol) 99%	67-63-0	480	6	ASTM F739	4	++
2,2,2-Trifluoroethanol 99%	75-89-8	43	2	ASTM F739	1	
Acetic acid 10%	64-19-7	480	6	ASTM F739	4	++
Acetic acid 50%	64-19-7	480	6	ASTM F739	4	++
Acetic acid 99%	64-19-7	118	3	ASTM F739	NT	NA
Acetone 99%	67-64-1	NT	NT		1	NA
Acrylonitrile 99%	107-13-1	12	1	ASTM F739	1	0
Ammonium hydroxide solution 25%	1336-21-6	480	6	EN 16523-1:2015	4	++
Ammonium hydroxide solution 29%	1336-21-6	480	6	ASTM F739	4	++
Aniline 99%	62-53-3	72	3	ASTM F739	1	
Benzene 99%	71-43-2	27	1	ASTM F739	1	*
Butyl Acetate 99%	123-86-4	164	4	ASTM F739	1	2
Carbon disulfide 99%	75-15-0	20	1	ASTM F739	2	=
Carbon Tetrachloride 99%	56-23-5	341	5	ASTM F739	3	++
Chlorobenzene 99%	108-90-7	42	2	ASTM F739	NT	NA
Chromic Acid 50%	7738-94-5	175	4	ASTM F739	4	++
Cumene 98%	98-82-8	271	5	ASTM F739	3	++

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for high chemical exposure or chemical immersion, limited to breakthrough time based on a working day.
- Used for repeated chemical contact, limited to total chemical exposure i.e.: accumulative breakthrough time based on a working day.
- Splash protection only, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- Not recommended, these gloves are deemed unsuitable for work with this chemical.
- NT: Not tested
- NA: "Not applicable" because not fully tested (only degradation OR permeation results)



Chemical Product	CAS#	Breakthrough time (minutes)	Permeation level	Standard	Degradatio level	Rating
Cyclohexane 99%	110-82-7	480	6	ASTM F739	4	++
Diethanolamine 97%	111-42-2	480	6	ASTM F739	4	++
Diethylamine 98%	109-89-7	53	2	EN 16523-1:2015	1	ā.
Dimethylformamide 99%	68-12-2	35	2	ASTM F739	NT	NA
Dimethylsulfoxide 99%	67-68-5	480	6	ASTM F739	3	++
Epichlorohydrin 99%	106-89-8	4	0	ASTM F739	NT	NA
Ethanol 95%	64-17-5	480	6	ASTM F739	4	++
Ether (Diethyl Ether) 99%	60-29-7	64	3	ASTM F739	4	++
Ethyl acetate 99%	141-78-6	27	1	EN 16523-1:2015	NT	NA
Ethylene glycol 99%	107-21-1	480	6	ASTM F739	4	++
Ethylene oxide 100%	75-21-8	32	2	ASTM F739	NT	NA
Formaldehyde 37%	50-00-0	480	6	ASTM F739	4	++
Freon 12 99%	75-71-8	480	6	ASTM F739	NT	NA
Fuel oils mixture	68476-34-6	480	6	ASTM F739	NT	NA
Furfural 99%	98-01-1	61	3	ASTM F739	NT	NA
Hydrazine 35%	302-01-2	480	6	ASTM F739	4	++
Hydrazine 70%	302-01-2	480	6	ASTM F739	4	++
Hydrochloric acid 10%	7647-01-0	480	6	ASTM F739	4	++
Hydrochloric acid 35%	7647-01-0	480	6	EN 374-3:2003	4	++
Hydrochloric acid 37%	7647-01-0	480	6	ASTM F739	4	++
Hydrochloric acid 50%	7647-01-0	NT	NT		4	NA
Hydrofluoric Acid 10%	7664-39-3	NT	NT		4	NA
Hydrofluoric Acid 49%	7664-39-3	134	4	ASTM F739	4	++
Hydrogen peroxide 30%	7722-84-1	480	6	EN 16523-1:2015	4	++
Isobutyl alcohol 99%	78-83-1	480	6	ASTM F739	4	++
Kerosene mixture	8008-20-6	480	6	ASTM F739	4	++

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for high chemical exposure or chemical immersion, limited to breakthrough time based on a working day.
- Used for repeated chemical contact, limited to total chemical exposure i.e.: accumulative breakthrough time based on a working day.
- Splash protection only, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- Not recommended, these gloves are deemed unsuitable for work with this chemical.

 □ NT: Not tested
- NA: "Not applicable" because not fully tested (only degradation OR permeation results)



Chemical Product	CAS#	Breakthrough time (minutes)	Permeation level	Standard	Degradatio level	Rating
m-Cresol 97%	108-39-4	210	4	ASTM F739	2	+
Methanol 99%	67-56-1	148	4	ASTM F739	3	++
Methylisobutylketone 99%	108-10-1	57	2	ASTM F739	NT	NA
n-Heptane 99%	142-82-5	480	6	ASTM F739	4	++
n-hexane 95%	110-54-3	480	6	ASTM F739	4	++
N-methyl-2-Pyrrolidone 99%	872-50-4	108	3	ASTM F739	NT	NA
N-N dimethyl acetamide 30%	127-19-5	480	6	ASTM F739	NT	NA
N-N dimethyl acetamide 99%	127-19-5	39	2	ASTM F739	1	¥ ·
Naphtha mixture	8030-30-6	480	6	ASTM F739	4	++
laphtha (Stoddart Solvent) mixture	8052-41-3	480	6	ASTM F739	4	++
Naphtha Heavy mixture	68551-17-7	NT	NT		4	NA
Naphtha VM&P mixture	8032-32-4	480	6	ASTM F739	4	++
Nitric acid 50%	7697-37-2	341	5	ASTM F739	3	++
Nitric acid 70%	7697-37-2	49	2	ASTM F739	NT	NA
Nitrobenzene 99%	98-95-3	45	2	ASTM F739	1	=
Oleic Acid 90%	112-80-1	NT	NT		4	NA
Phenol 85%	108-95-2	255	5	ASTM F739	3	++
Phosphoric acid 75%	7664-38-2	480	6	ASTM F739	4	++
Phosphoric acid 85%	7664-38-2	480	6	ASTM F739	4	++
Polychlorinated Biphenyl (PCB) (50%) in 1,2,4-Trichlorobenzene mixture	11097-69-1	343	5	ASTM F739	NT	NA
Potassium Hydroxide 50%	1310-58-3	480	6	ASTM F739	4	++
Pyridine 99%	110-86-1	26	1	ASTM F739	1	# 1
Sodium hydroxide 20%	1310-73-2	480	6	ASTM F739	4	++
Sodium hydroxide 40%	1310-73-2	480	6	ASTM F739	4	++
Sodium hydroxide 50%	1310-73-2	480	6	ASTM F739	4	++

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for high chemical exposure or chemical immersion, limited to breakthrough time based on a working day.
- Used for repeated chemical contact, limited to total chemical exposure i.e.: accumulative breakthrough time based on a working day.
- Splash protection only, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
 Not recommended, these gloves are deemed unsuitable for work with this chemical.
- NT: Not tested
- NA: "Not applicable" because not fully tested (only degradation OR permeation results)



Chemical Product	CAS#	Breakthrough time (minutes)	Permeation level	Standard	Degradatio level	Rating
Styrene 99%	100-42-5	36	2	EN 16523-1:2015	1	¥
Sulfuric acid 10%	7664-93-9	480	6	ASTM F739	4	++
Sulfuric acid 40%	7664-93-9	480	6	ASTM F739	4	++
Sulfuric acid 50%	7664-93-9	480	6	ASTM F739	4	++
Sulfuric acid 96%	7664-93-9	243	5	EN 16523-1:2015	NT	NA
t-Butyl Methyl Ether 98%	1634-04-4	480	6	ASTM F739	NT	NA
Tert. Amyl Methyl Ether 96%	994-05-8	480	6	ASTM F739	NT	NA
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	480	6	ASTM F739	4	++
Tetrahydrofurane 99%	109-99-9	17	1	ASTM F739	1	ē
Toluene 99%	108-88-3	28	1	ASTM F739	1	- i
Toluene Diisocyanate (TDI) 80%	584-84-9	480	6	ASTM F739	2	+
Trichloroethylene 99%	79-01-6	9	0	ASTM F739	1	
Triethanolamine 98%	102-71-6	480	6	ASTM F739	4	++
Turpentine mixture	8006-64-2	480	6	ASTM F739	4	++
Unleaded gasoline mixture	8006-61-9	480	6	ASTM F739	4	++
Vinyl acetate 99%	108-05-4	30	1	ASTM F739	2	=
Xylene 99%	1330-20-7	92	3	ASTM F739	2	+

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for high chemical exposure or chemical immersion, limited to breakthrough time based on a working day.
- Used for repeated chemical contact, limited to total chemical exposure i.e.: accumulative breakthrough time based on a working day.
- Splash protection only, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- Not recommended, these gloves are deemed unsuitable for work with this chemical.
- NT: Not tested
- NA: "Not applicable" because not fully tested (only degradation OR permeation results)

