

Trade name: BONDIC 5998443

Version: 3 / US

Date revised: 01.02.2018

Replaces Version: 2 / US

Print date: 01.02.18

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264.1 Wash hands thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P312 Call a POISON CENTER/doctor/ if you feel unwell.
 P333 If skin irritation or rash occurs:
 P337 If eye irritation persists:
 P362+P364 Take off contaminated clothing and wash it before reuse.

Storage/Disposal

P405 Store locked up.
 P501.1 Dispose of contents/container to industrial incineration plant.

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients

Hazardous ingredients according to OSHA Hazard Communication Standard 29 CFR 1910:1200

1-Vinylhexahydro-2H-azepin-2-one

CAS No. 2235-00-9
 Concentration >= 25 < 42 %

Isobornyl acrylate

CAS No. 5888-33-5
 Concentration >= 2,5 < 10 %

2-Hydroxy-2-methylpropiophenone

CAS No. 7473-98-5
 Concentration >= 1 < 1,4 %

Diphenyl(2,4,6 trimethylbenzoyl)phosphine oxide

CAS No. 75980-60-8
 Concentration >= 1 < 2,5 %

1,4-Dihydroxybenzene

CAS No. 123-31-9
 Concentration >= 0,01 < 0,1 %

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, soaked clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid. In any case show the physician the Safety Data Sheet.

After inhalation

Ensure supply of fresh air. Remove affected person from danger area. When vapours are intensively inhaled, seek medical help immediately.

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After skin contact

Wash off immediately with soap and water. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Take medical treatment.

After ingestion

Call in a physician immediately and show him the Safety Data Sheet. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

4.2. Most important symptoms and effects, both acute and delayed

Until now no symptoms known so far.

4.3. Indication of any immediate medical attention and special treatment needed

Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry powder, Foam, Carbon dioxide

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus. Wear full protective suit.

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations. Observe manufacturer's / distributor's instructions.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use breathing apparatus if exposed to vapours/dust/aerosol. Avoid contact with skin, eyes and clothing. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Pick up with absorbent material. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Containers in which spilt substance has been collected must be adequately labelled. Dispose of absorbed material in accordance with the regulations.

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6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid formation of aerosols. Provide good ventilation of working area (local exhaust ventilation if necessary). Observe the usual precautions for handling chemicals. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Provide solvent-resistant and impermeable floor.

Hints on storage assembly

Do not store together with foodstuffs.

Further information on storage conditions

Protect from heat and direct sunlight. Keep container tightly closed and dry in a cool, well-ventilated place. Keep locked up and out of the reach of children.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other information

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

General protective and hygiene measures

Hold eye wash fountain available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Storage of foodstuffs in work rooms is forbidden. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Respiratory protection

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Short term: filter apparatus, Filter A

Hand protection

Chemical resistant gloves	
Use	Short-term hand contact
Appropriate Material	nitrile
Material thickness	>= 0,4 mm
Breakthrough time	> 480 min

Eye protection

Safety glasses with side protection shield; Face shield

Body protection

Clothing as usual in the chemical industry. Protective shoes

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	liquid
Colour	colourless
Odour	characteristic

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Odour threshold

Remarks not determined

pH value

Remarks not determined

Melting point

Remarks not determined

Freezing point

Remarks not determined

Initial boiling point and boiling range

Remarks not determined

Flash point

Value > 100 °C

Evaporation rate (ether = 1) :

Remarks not determined

Flammability (solid, gas)

not determined

Upper/lower flammability or explosive limits

Remarks not determined

Vapour pressure

Remarks not determined

Vapour density

Remarks not determined

Density

Value appr. 1,1 g/cm³

Solubility in water

Remarks not determined

Solubility(ies)

Remarks not determined

Partition coefficient: n-octanol/water

Remarks not determined

Ignition temperature

Remarks not determined

Decomposition temperature

Remarks not determined

Viscosity

dynamic

Explosive properties

evaluation not determined

Oxidising properties

Remarks not determined

9.2. Other information

Other information

None known

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

No hazardous reactions known.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

No hazardous reactions known.

Decomposition temperature

Remarks not determined

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

Toxic gases/vapours, Irritant gases/vapours

SECTION 11: Toxicological information

11.1. Information on toxicological effects

National Toxicology Program (NTP)

Components: 1,4-Dihydroxybenzene

International Agency for research on Cancer (IARC)

Components: 1,4-Dihydroxybenzene

Acute oral toxicity

ATE	3.636,05	mg/kg
	32	

Method calculated value according to GHS (e.g see UN GHS)

Acute oral toxicity (Components)

1-Vinylhexahydro-2H-azepin-2-one

Species	rat		
LD50	1860	mg/kg	

1-Vinylhexahydro-2H-azepin-2-one

Species	rat		
LD50	1114	mg/kg	

2-Hydroxy-2-methylpropiophenone

Species	rat		
LD50	1694	mg/kg	

Acute dermal toxicity

Remarks not determined

Acute dermal toxicity (Components)

1-Vinylhexahydro-2H-azepin-2-one

Species	rat		
LD50	> 2000	mg/kg	

2-Hydroxy-2-methylpropiophenone

Species	rat		
LD50	6929	mg/kg	

Acute inhalational toxicity

Remarks not determined

Acute inhalative toxicity (Components)

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1-Vinylhexahydro-2H-azepin-2-one

Species	rat			
LC50	>	1,6		mg/l
Duration of exposure		8	h	

Skin corrosion/irritation

Remarks not determined

Serious eye damage/irritation

Remarks not determined

Sensitization

Remarks not determined

Sensitization (Components)

1-Vinylhexahydro-2H-azepin-2-one

Route of exposure	dermal
Species	mouse
evaluation	sensitizing

2-Hydroxy-2-methylpropiophenone

Route of exposure	dermal
Species	guinea pig
evaluation	non-sensitizing

Subacute, subchronic, chronic toxicity

Remarks not determined

Mutagenicity

Remarks not determined

Reproductive toxicity

Remarks not determined

Carcinogenicity

Remarks not determined

Specific Target Organ Toxicity (STOT)

Remarks not determined

Experience in practice

Inhalation may lead to irritation of the respiratory tract.

Other information

No toxicological data are available.

SECTION 12: Ecological information

12.1. Toxicity

General information

not determined

Fish toxicity (Components)

1-Vinylhexahydro-2H-azepin-2-one

Species	zebra fish (Brachydanio rerio)			
LC50		318		mg/l
Duration of exposure		96	h	

2-Hydroxy-2-methylpropiophenone

Species	golden orfe (Leuciscus idus)			
LC50		160		mg/l
Duration of exposure		48	h	

Daphnia toxicity (Components)

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1-Vinylhexahydro-2H-azepin-2-one

Species	Daphnia magna		
EC50	> 100		mg/l
Duration of exposure	48	h	

2-Hydroxy-2-methylpropiophenone

Species	Daphnia magna		
EC50	> 119		mg/l
Duration of exposure	48	h	

Algae toxicity (Components)

1-Vinylhexahydro-2H-azepin-2-one

Species	Scenedesmus subspicatus		
EC50	> 100		mg/l
Duration of exposure	72	h	

2-Hydroxy-2-methylpropiophenone

Species	Scenedesmus subspicatus		
EC50	1,95		mg/l
Duration of exposure	72	h	

2-Hydroxy-2-methylpropiophenone

Species	Scenedesmus subspicatus		
EC10	0,629		mg/l
Duration of exposure	72	h	

Bacteria toxicity (Components)

1-Vinylhexahydro-2H-azepin-2-one

Species	activated sludge		
EC50	622		mg/l
Duration of exposure	16	h	

12.2. Persistence and degradability

General information

not determined

12.3. Bioaccumulative potential

General information

not determined

Partition coefficient: n-octanol/water

Remarks not determined

12.4. Mobility in soil

General information

not determined

12.5. Results of PBT and vPvB assessment

General information

not determined

12.6. Other adverse effects

General information

not determined

General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

SECTION 13: Disposal considerations

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13.1. Waste treatment methods

Disposal recommendations for the product

Dispose of waste according to applicable legislation.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

SECTION 14: Transport information ***

Ground transport DOT ***

Non-dangerous goods

Marine transport IMDG/GGVSee

The product does not constitute a hazardous substance in sea transport.

Air transport ICAO/IATA

The product does not constitute a hazardous substance in air transport.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Other information

All components are contained in the TSCA inventory or exempted.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355)

Components: 1,4-Dihydroxybenzene

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Components: 1,4-Dihydroxybenzene

Clean Water Act (CWA) Section 307 Toxic Pollutants (40 CFR 401.15)

The product does not contain any listed components.

Clean Water Act (CWA) Section 311 Toxic Pollutants (40 CFR 116.4)

The product does not contain any listed components.

Clean Air Act (CAA) Section 112 Regulated Toxic Substances And Threshold Quantities For Accidental Release Prevention (40 CFR 68.130 Table 1+2)

Components: 1,4-Dihydroxybenzene

Clean Air Act (CAA) Section 112 Regulated Flammable Substances And Threshold Quantities For Accidental Release Prevention (40 CFR 68.130 Table 3+4)

The product does not contain any listed components.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

Warning! This product may contain trace quantities of substance(s) known to the state of California to cause cancer and/or reproductive toxicity - not added as a part of the formulation but remaining as residuals from the manufacturing process of our raw material suppliers.

NFPA Rating Information

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HMIS[®] Rating Information

Health	*	1
Flammability		1
Physical Hazard		
Personal Protection		

SECTION 16: Other information

Department issuing safety data sheet

Department product safety

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.