

Precautionary statements

Prevention

P261 Avoid breathing vapours.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Storage

Store away from incompatible materials.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information None.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
(1-Methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bismethacrylate	60 - 90	24448-20-2 246-263-7	-	-	
Classification:	Skin Sens. 1;H317				
2-Hydroxyethyl methacrylate	10 - <20	868-77-9 212-782-2	-	607-124-00-X	
Classification:	Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Irrit. 2;H319				
Cumene hydroperoxide	<1	80-15-9 201-254-7	-	617-002-00-8	
Classification:	Org. Perox. E;H242, Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Corr. 1B;H314, Acute Tox. 3;H331, STOT RE 2;H373, Aquatic Chronic 2;H411				
2'-Phenylacetohydrazide	< 0.2	114-83-0 204-055-3	-	-	
Classification:	Acute Tox. 3;H301, Acute Tox. 4;H312, Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Irrit. 2;H319, Acute Tox. 4;H332, STOT SE 3;H335				
Hydroquinone	<0.025	123-31-9 204-617-8	-	604-005-00-4	M=10
Classification:	Acute Tox. 4;H302, Skin Sens. 1;H317, Eye Dam. 1;H318, Muta. 2;H341, Carc. 2;H351, Aquatic Acute 1;H400				

List of abbreviations and symbols that may be used above

M: M-factor

Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words "non-stabilised".

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

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

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Avoid contact with skin and eyes. Avoid inhalation of vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. In case of spills, beware of slippery floors and surfaces.

For emergency responders Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up.

6.2. Environmental precautions Prevent further leakage or spillage if safe to do so. Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Eliminate all ignition sources. Ventilate the area.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste for proper disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Persons susceptible for allergic reactions should not handle this product. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s) Thread Locking Adhesive.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Hydroquinone (CAS 123-31-9)	TWA	0.5 mg/m ³

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs)	Not available.
8.2. Exposure controls	
Appropriate engineering controls	Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of exposure. Provide easy access to eye wash facilities in the work area.
Individual protection measures, such as personal protective equipment	
General information	Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Wear approved safety glasses or goggles.
Skin protection	
- Hand protection	Wear protective gloves. Nitrile or neoprene gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
- Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P2).
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Colour	Green.
Odour	Ester-like.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	102.0 °C (215.6 °F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	> 0.1 kPa (25 °C)
Vapour density	> 1 (Air = 1)
Relative density	1.1 (25 °C) (Water = 1)
Solubility(ies)	Slightly soluble in water.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	500 mPa·s (25 °C)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

Explosive limit	Not applicable.
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SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidizers, strong acids, and strong bases. Reducing Agents. Metals. Metal salts. Radical initiators.
10.6. Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

11.1. Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test results
2-Hydroxyethyl methacrylate (CAS 868-77-9)		
Acute		
Dermal		
LD50	Rabbit	> 3000 mg/kg
Oral		
LD50	Rat	> 4000 mg/kg
Cumene hydroperoxide (CAS 80-15-9)		
Acute		
Dermal		
LD50	Rat	500 mg/kg
Inhalation		
LC50	Rat	220 ppm, 4 hours
Oral		
LD50	Rat	800 mg/kg
Hydroquinone (CAS 123-31-9)		
Acute		
Dermal		
LD50	Rat	> 900 mg/kg
Oral		
LD50	Rat	320 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory sensitisation	Based on available data, the classification criteria are not met.	
Skin sensitisation	May cause an allergic skin reaction.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.	
Carcinogenicity	Based on available data, the classification criteria are not met.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Hydroquinone (CAS 123-31-9)	3 Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	Based on available data, the classification criteria are not met.	

Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	No information available.
Other information	Symptoms may be delayed.

SECTION 12: Ecological information

12.1. Toxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species		Test results
Cumene hydroperoxide (CAS 80-15-9)			
Aquatic			
Crustacea	EC50	Daphnia	7 mg/l, 24 hours
Fish	LC50	Fish	3.9 mg/l, 96 hours
Hydroquinone (CAS 123-31-9)			
Aquatic			
Algae	EC50	Algae (<i>Selenastrum capricornutum</i>)	0.3 mg/l, 72 hours
Crustacea	LC50	Fairy shrimp (<i>Streptocephalus texanus</i>)	0.09 - 0.1 mg/l, 24 hours
		Water flea (<i>Daphnia magna</i>)	0.09 mg/l, 24 hours
Fish	LC50	Zebrafish (<i>Danio rerio</i>)	0.11 - 0.64 mg/l, 96 hours

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient

n-octanol/water (log Kow)

2'-Phenylacetohydrazide (CAS 114-83-0)	0.74
2-Hydroxyethyl methacrylate (CAS 868-77-9)	0.47
Hydroquinone (CAS 123-31-9)	0.59

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil The product is slightly soluble in water. Expected to be slightly to moderately mobile in soil.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk Not applicable.

according to Annex II of Marpol and the IBC Code

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Cumene hydroperoxide (CAS 80-15-9)

Hydroquinone (CAS 123-31-9)

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended and respective national laws implementing EC directives.

National regulations

Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioaccumulative.

References

HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)
ESIS (European chemical Substances Information System)

Information on evaluation method leading to the classification of mixture

The mixture is classified based on test data for physical hazards. The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. For details, refer to Sections 9, 11 and 12.

**Full text of any H-statements
not written out in full under
Sections 2 to 15**

H242 Heating may cause a fire.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Training information

Follow training instructions when handling this material.

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.