



## SAFETY DATA SHEET ALOCIT H1 HARDENER

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name ALOCIT H1 HARDENER

Product number AS33051A

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses ~~FOR USE IN EPOXY SYSTEMS~~

#### 1.3. Details of the supplier of the safety data sheet

Supplier ALOCIT USA  
3169 S. Arlington Ave., Indianapolis, Indiana 46203.  
+1 317 631-9100  
ALOCIT INTERNATIONAL  
3 Charles Wood Road, Dereham, UK NR19 1SX  
+44 1362 694915

#### 1.4. Emergency telephone number

Emergency telephone 24 HR EMERGENCY TELEPHONE NUMBER : US +1 800 535 5053 UK + 44 (0) 7930 595916

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (SI 2019 No. 720)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

Human health Corrosive. Prolonged contact causes serious eye and tissue damage.

Environmental The product contains a substance which may have hazardous effects on the environment.

#### 2.2. Label elements

##### Hazard pictograms



Signal word Danger

Hazard statements  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.

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<b>Precautionary statements</b>	<p>P260 Do not breathe vapour/ spray.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
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**Contains** 3-aminomethyl-3,5,5-trimethylcyclohexylamine, benzyl alcohol, Trimethylhexamethyldiamine

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>3-aminomethyl-3,5,5-trimethylcyclohexylamine</b>	<b>30-60%</b>
CAS number: 2855-13-2	EC number: 220-666-8
<b>Classification</b>	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	
<b>Trimethylhexamethyldiamine</b>	<b>10-30%</b>
CAS number: 25513-64-8	EC number: 247-063-2
<b>Classification</b>	
Acute Tox. 4 - H302	
Skin Corr. 1A - H314	
Eye Dam. 1 - H318	
Skin Sens. 1A - H317	

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<b>benzyl alcohol</b>	<b>10-30%</b>
CAS number: 100-51-6	EC number: 202-859-9
<b>Classification</b>	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Eye Irrit. 2 - H319	

The full text for all hazard statements is displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Remove affected person from source of contamination. Rinse immediately with plenty of water. While rinsing, remove clothing not adhering to the affected area. Keep affected person under observation. If in doubt, get medical attention promptly. Never give anything by mouth to an unconscious person. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. First aid personnel should wear appropriate protective equipment during any rescue. Consult a physician for specific advice. Show this Safety Data Sheet to the medical personnel. Treat symptomatically.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. For breathing difficulties, oxygen may be necessary. Get medical attention if symptoms are severe or persist.
<b>Ingestion</b>	Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Rinse mouth thoroughly with water. Get medical attention if a large quantity has been ingested. Get medical attention if symptoms are severe or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. Care should be taken to avoid contact with contaminants when removing contaminated clothing. Get medical attention if any discomfort continues. In the event of any sensitisation symptoms developing, ensure further exposure is avoided. Consult a physician for specific advice.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Do not rub eye. Keep affected person under observation. Get medical attention if symptoms are severe or persist after washing. Consult a physician for specific advice.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. The product contains a sensitising substance. Treat symptomatically. See Section 11 for additional information on health hazards.
<b>Inhalation</b>	The product is considered to be a low hazard under normal conditions of use.
<b>Ingestion</b>	Harmful if swallowed. May cause stomach pain or vomiting.
<b>Skin contact</b>	Severe skin irritation. The product contains a sensitising substance. May cause skin sensitisation or allergic reactions in sensitive individuals.
<b>Eye contact</b>	Causes severe skin burns and eye damage.

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

**Specific treatments** Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

**Suitable extinguishing media** Carbon dioxide (CO<sub>2</sub>). Foam. Water spray, fog or mist.

**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

**Specific hazards** None known.

**Hazardous combustion products** Harmful gases or vapours. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

#### 5.3. Advice for firefighters

**Protective actions during firefighting** Do not use water jet as an extinguisher, as this will spread the fire. Avoid breathing fire gases or vapours. Contain and collect extinguishing water. Do not enter storage areas or confined spaces unless adequately ventilated.

If risk of water pollution occurs, notify appropriate authorities. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Move containers from fire area if it can be done without risk. No action shall be taken without appropriate training or involving any personal risk.

Use water spray to reduce vapours. Ventilate closed spaces before entering them. Containers close to fire should be removed or cooled with water. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for firefighters** Firefighter's clothing will provide a basic level of protection for chemical incidents. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid inhalation of vapours. Avoid contact with contaminated tools and objects. Avoid contact with eyes and prolonged skin contact. Avoid inhalation of dust and contact with skin and eyes. Avoid inhalation of vapours and contact with skin and eyes.

Contact with hot product can cause serious thermal burns. Do not enter storage areas or confined spaces unless adequately ventilated. Do not handle broken packages without protective equipment.

Ensure procedures and training for emergency decontamination and disposal are in place. Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8.

If ventilation is inadequate, suitable respiratory protection must be worn. Keep unnecessary and unprotected personnel away from the spillage. No action shall be taken without appropriate training or involving any personal risk. Take care as floors and other surfaces may become slippery.

Treat the spilled material according to the instructions in the clean-up section. Wash thoroughly after dealing with a spillage. No smoking, sparks, flames or other sources of ignition near spillage. Take precautionary measures against static discharges.

**For non-emergency personnel** Keep unnecessary and unprotected personnel away from the spillage. Follow precautions for safe handling described in this safety data sheet. Ensure procedures and training for emergency decontamination and disposal are in place. For personal protection, see Section 8.

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**For emergency responders** Keep unnecessary and unprotected personnel away from the spillage. For personal protection, see Section 8.

## 6.2. Environmental precautions

**Environmental precautions** Dangerous for the environment. Avoid release to the environment. Avoid discharge into drains or watercourses or onto the ground.  
Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid spreading dust or contaminated materials. Contain spillage with sand, earth or other suitable non-combustible material. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

## 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** When handling waste, the safety precautions applying to handling of the product should be considered. Provide adequate ventilation. To prevent release, place container with damaged side up.  
Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Collect and dispose of spillage as indicated in Section 13. Do not empty into drains. No smoking, sparks, flames or other sources of ignition near spillage.

## 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

**Usage precautions** Avoid generation and spreading of dust. Provide adequate ventilation. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Avoid inhalation of vapours and contact with skin and eyes. Contact with hot product can cause serious thermal burns. Contaminated rags and cloths must be put in fireproof containers for disposal. Ensure procedures and training for emergency decontamination and disposal are in place.

**Advice on general occupational hygiene** Contaminated work clothing should not be allowed out of the workplace. Change work clothing daily before leaving workplace. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Remove contaminated clothing and protective equipment before entering eating areas. Take off contaminated clothing and wash it before reuse.  
Promptly remove any clothing that becomes wet or contaminated. Care should be taken to avoid contact with contaminants when removing contaminated clothing. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product.  
Eye wash facilities and emergency shower must be available when handling this product. Use appropriate skin cream to prevent drying of skin. Wash hands thoroughly after handling. Wash promptly with soap and water if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep containers upright. Protect from freezing and direct sunlight. Keep away from food and drink. Store away from incompatible materials (see Section 10). Use appropriate containment to avoid environmental contamination.

**Storage class** Corrosive storage.

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### 7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine (CAS: 2855-13-2)

**DNEL** General population - Oral; Long term systemic effects: 0.526 mg/kg

**PNEC**

- Fresh water; 0.06 mg/l
- marine water; 0.006 mg/l
- Intermittent release, Water; 0.23 mg/l
- Sediment, Fresh water; 5.784 mg/kg
- marine water, Sediment; 0.578 mg/kg
- Soil; 1.121 mg/kg
- STP; 3.18 mg/l

#### benzyl alcohol (CAS: 100-51-6)

**DNEL**

Workers - Dermal; : 9.5 mg/kg  
 Workers - Inhalation; : 90 mg/m<sup>3</sup>  
 Consumer - Oral; Short term systemic effects: 25 mg/kg/day  
 Consumer - Oral; Long term systemic effects: 5 mg/kg/day  
 Workers - Inhalation; Short term systemic effects: 450 mg/m<sup>3</sup>  
 Consumer - Inhalation; Short term systemic effects: 95.5 mg/m<sup>3</sup>  
 Workers - Dermal; Short term systemic effects: 47 mg/kg/day  
 Consumer - Dermal; Short term systemic effects: 28.5 mg/kg/day  
 Consumer - Dermal; Long term systemic effects: 5.7 mg/kg/day

**PNEC**

- Soil; 0.456 mg/kg
- STP; 39 mg/l
- Sediment; 5.27 mg/kg
- marine water, Sediment; 0.527 mg/kg
- Intermittent release; 2.3 mg/l
- Fresh water; 1 mg/l
- marine water; 0.1 mg/l

#### Trimethylhexamethyldiamine (CAS: 25513-64-8)

**PNEC**

- Fresh water; 0.0295 mg/l
- marine water; 0.00295 mg/l
- Intermittent release; 0.295 mg/l
- Sediment, Fresh water; 0.18 mg/kg
- Sediment, marine water; 0.018 mg/kg
- Soil; 0.019 mg/kg
- STP; 72 mg/l

### 8.2. Exposure controls

#### Protective equipment



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<b>Appropriate engineering controls</b>	As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits.
<b>Eye/face protection</b>	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Tight-fitting safety glasses. Personal protective equipment that provides appropriate eye and face protection should be worn.
<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.
<b>Other skin and body protection</b>	Wear suitable protective clothing as protection against splashing or contamination.
<b>Hygiene measures</b>	Good personal hygiene procedures should be implemented. Wash after use and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Take off contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Provide eyewash station and safety shower.
<b>Respiratory protection</b>	No specific requirements are anticipated under normal conditions of use.
<b>Thermal hazards</b>	Contact with hot product can cause serious thermal burns. If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with high temperatures. To protect hands from high temperatures, suitable thermal gloves should be used.
<b>Environmental exposure controls</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Viscous liquid.
<b>Colour</b>	Amber.
<b>Odour</b>	Ammonia.
<b>Odour threshold</b>	No information available.
<b>pH</b>	pH (concentrated solution): 11
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	>200°C @ 760 mm Hg
<b>Flash point</b>	>100°C Closed cup.
<b>Evaporation rate</b>	No information available.
<b>Evaporation factor</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.

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<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Other flammability</b>	No information available.
<b>Vapour pressure</b>	No information available.
<b>Vapour density</b>	No information available.
<b>Relative density</b>	1.020 @ °C
<b>Bulk density</b>	No information available.
<b>Solubility(ies)</b>	No information available.
<b>Partition coefficient</b>	Not available.
<b>Auto-ignition temperature</b>	No information available.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	12.0 P @ 25°C
<b>Explosive properties</b>	No information available.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Not applicable.
<b>9.2. Other information</b>	
<b>Other information</b>	Not known.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

#### 10.2. Chemical stability

**Stability** Stable under the prescribed storage conditions.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Under normal conditions of storage and use, no hazardous reactions will occur.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid exposure to high temperatures or direct sunlight. Containers can burst violently or explode when heated, due to excessive pressure build-up.

#### 10.5. Incompatible materials

**Materials to avoid** Acids - oxidising. Avoid contact with strong oxidising agents.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Does not decompose when used and stored as recommended. Heating may generate the following products: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Toxicological effects** No information available.

#### Acute toxicity - oral



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<b>Notes</b>	(oral LD <sub>50</sub> )	Not available.
<b>ATE oral (mg/kg)</b>		1,576.05
<b><u>Acute toxicity - dermal</u></b>		
<b>ATE dermal (mg/kg)</b>		6,133.33
<b><u>Acute toxicity - inhalation</u></b>		
<b>Notes (inhalation LC<sub>50</sub>)</b>		Not available.
<b>ATE inhalation (dusts/mists mg/l)</b>		20.89
<b><u>Serious eye damage/irritation</u></b>		
<b>Serious eye damage/irritation</b>		Not available.
<b><u>Germ cell mutagenicity</u></b>		
<b>Genotoxicity - in vitro</b>		Not available.
<b>Genotoxicity - in vivo</b>		Not available.
<b><u>Carcinogenicity</u></b>		
<b>Carcinogenicity</b>		Not available.
<b><u>Reproductive toxicity</u></b>		
<b>Reproductive toxicity - fertility</b>		Not available.
<b>Reproductive toxicity - development</b>		Not available.
<b><u>Specific target organ toxicity - single exposure</u></b>		
<b>STOT - single exposure</b>		Not available.
<b><u>Specific target organ toxicity - repeated exposure</u></b>		
<b>STOT - repeated exposure</b>		Not available.
<b>Inhalation</b>		Harmful by inhalation.
<b>Ingestion</b>		Harmful if swallowed.
<b>Skin contact</b>		May cause sensitisation by skin contact. Harmful in contact with skin. Causes burns.
<b>Eye contact</b>		Irritating to eyes.
<b>Route of exposure</b>		Inhalation Ingestion. Skin and/or eye contact

### Toxicological information on ingredients.

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 1,030.0

**Species** Rat

**ATE oral (mg/kg)** 1,030.0

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 1,840.0

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<b>Species</b>	Rat
<b>ATE dermal (mg/kg)</b>	1,840.0
<b><u>Acute toxicity - inhalation</u></b>	
<b>Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l)</b>	5.01
<b>ATE inhalation (dusts/mists mg/l)</b>	5.01

### Trimethylhexamethyldiamine

<b><u>Acute toxicity - oral</u></b>	
<b>Acute toxicity oral (LD<sub>50</sub> mg/kg)</b>	910.0
<b>Species</b>	Rat
<b>ATE oral (mg/kg)</b>	910.0
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Corrosive to skin. Corrosivity to eyes is assumed.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Does not contain any substances known to be mutagenic.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	Not determined.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	No information required.

### benzyl alcohol

<b><u>Acute toxicity - oral</u></b>	
<b>Acute toxicity oral (LD<sub>50</sub> mg/kg)</b>	1,620.0
<b>Species</b>	Rat
<b>ATE oral (mg/kg)</b>	1,620.0
<b><u>Acute toxicity - inhalation</u></b>	
<b>Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l)</b>	4.178
<b>Species</b>	Rat
<b>ATE inhalation (dusts/mists mg/l)</b>	4.178
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Does not contain any substances known to be mutagenic.
<b>Genotoxicity - in vivo</b>	Does not contain any substances known to be mutagenic.
<b><u>Carcinogenicity</u></b>	

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### Carcinogenicity

Does not contain any substances known to be carcinogenic.

### SECTION 12: Ecological information

**Ecotoxicity** Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.

#### 12.1. Toxicity

##### Acute aquatic toxicity

**Acute toxicity - fish** Not available.

**Acute toxicity - aquatic invertebrates** Not available.

**Acute toxicity - aquatic plants** Not available.

**Acute toxicity - microorganisms** Not available.

#### Ecological information on ingredients.

##### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 110 mg/l, Leuciscus idus (Golden orfe)

**Acute toxicity - aquatic invertebrates** NOEC, 21 days: 3 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** ErC50, 72 hours: >50 mg/l, Algae

##### Trimethylhexamethyldiamine

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 48 hours: 174 mg/l, Leuciscus idus (Golden orfe)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 24 hours: 31.5 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EbC50, 72 hours: 29.5 mg/l, Scenedesmus subspicatus

**Acute toxicity - microorganisms** EC<sub>50</sub>, 17 hours: 89 mg/l, Activated sludge

##### benzyl alcohol

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 460 mg/l, Fish

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 230 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** IC<sub>50</sub>, 72 hours: 770 mg/l, Algae

**Acute toxicity - microorganisms** IC<sub>50</sub>, 24 hours: 390 mg/l, Bacteria

#### 12.2. Persistence and degradability

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**Persistence and degradability** There are no data on the degradability of this product.

### Ecological information on ingredients.

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

**Persistence and degradability** The product is not readily biodegradable.

#### Trimethylhexamethyldiamine

**Persistence and degradability** The product is not biodegradable.

#### benzyl alcohol

**Persistence and degradability** The product is readily biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Not available.

### Ecological information on ingredients.

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

**Bioaccumulative potential** log Pow: 0.99,

#### Trimethylhexamethyldiamine

**Bioaccumulative potential** No data available on bioaccumulation.

#### benzyl alcohol

**Bioaccumulative potential** Not relevant.

### 12.4. Mobility in soil

**Mobility** Not determined.

### Ecological information on ingredients.

#### benzyl alcohol

**Mobility** The product is soluble in water.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### Ecological information on ingredients.

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

#### Trimethylhexamethyldiamine

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**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### benzyl alcohol

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### **General information**

Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Confirm disposal procedures with environmental engineer and local regulations. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

#### **Disposal methods**

Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Confirm disposal procedures with environmental engineer and local regulations.

Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Dispose of contents/container in accordance with local regulations. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Do not empty into drains. External recovery, treatment, recycling and disposal of waste should comply with all applicable local and/or national regulations.

Only store in correctly labelled containers. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. When handling waste, the safety precautions applying to handling of the product should be considered.

#### **Waste class**

16 05 08 discarded organic chemicals consisting of or containing dangerous substances

## SECTION 14: Transport information

### 14.1. UN number

**UN No. (ADR/RID)** 2735

**UN No. (IMDG)** 2735

**UN No. (ICAO)** 2735

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** POLYAMINES, LIQUID, CORROSIVE, N.O.S (Isophoronediamine + Trimethylhexamethyldiamine mixture)

**Proper shipping name (IMDG)** POLYAMINES, LIQUID, CORROSIVE, N.O.S (Isophoronediamine + Trimethylhexamethyldiamine mixture)

**Proper shipping name (ICAO)** POLYAMINES, LIQUID, CORROSIVE, N.O.S (Isophoronediamine + Trimethylhexamethyldiamine mixture)

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**Proper shipping name (ADN)** POLYAMINES, LIQUID, CORROSIVE, N.O.S (Isophoronediamine + Trimethylhexamethyldiamine mixture)

### 14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID label	8
IMDG class	8
ICAO class/division	8

### Transport labels



### 14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

EmS	F-A, S-B
Emergency Action Code	3X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## SECTION 15: Regulatory information

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

<b>National regulations</b>	Control of Substances Hazardous to Health Regulations 2002 (as amended).
<b>EU legislation</b>	Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

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**Guidance** A guide to local exhaust ventilation (LEV) HSG258 (as ammended)  
Workplace Exposure Limits EH40.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>General information</b>	Only trained personnel should use this material.
<b>Revision date</b>	10/02/2021
<b>Revision</b>	13
<b>Supersedes date</b>	10/02/2021
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H412 Harmful to aquatic life with long lasting effects.

The information contained within this document is presented in good faith and is believed to be correct. Alocit International Limited makes no representation as to the accuracy and/or completeness of this information. This information is issued on the condition that the user will determine the safety and suitability of products for their purposes prior to use. All technical details and values presented are deemed typical and do not constitute a delivery specification.