

# SAFETY DATA SHEET (MSDS)



**Ronacrete**  
WORLD CLASS MANUFACTURER

According to 1907/2006/EC, Article 31  
**VERTICAL HIGH BUILD COMP.A**

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

### 1.1 Product identifier

Trade Reference: RonaFloor HB Vertical Grade

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

No further relevant information available.

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

Manufacturer/Supplier:

Ronacrete Ltd

Ronac House, Flex Meadow

Harlow, Essex, CM19 5TD

E-mail: [technical@ronacrete.co.uk](mailto:technical@ronacrete.co.uk)

Telephone: +44 1279 638700

### 1.4 Emergency telephone number:

Ronacrete Ltd

[technical@ronacrete.co.uk](mailto:technical@ronacrete.co.uk)

Telephone: +44 1279 638700

9.00am to 5.00pm Mon - Fri

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards: Not Classified

Health hazards: Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards: Aquatic Chronic 2 - H411

### 2.2 Label elements

#### Hazard pictograms



**Signal Word:** WARNING

#### Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash contaminated skin thoroughly after handling.

P273 Avoid release to the environment.

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P280 Wear protective gloves / eye protection / face protection.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P391 Collect spillage.

### Contains:

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE, BISPHENOL F DIGLYCIDYL ETHER,  
ISOMER MIXTURE, ALKYL(C12-14) GLYCIDYL ETHER

### 2.3 Other hazards

This product does not contain any substances classified as PBT or vPvB. (@ >= 0.1%). The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Chemical characterisation: Mixtures

Dangerous components:		
CAS number: 1675-54-3 EC number: 216-823-5 RRN: 01-2119456619-26-XXXX	BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE	25 - 50%
	Acute Toxicity Estimate (oral): LD <sub>50</sub> > 15000 mg/kg, Oral, Rat Acute Toxicity Estimate (dermal): LD <sub>50</sub> 23000 mg/kg, Dermal, Rabbit Skin Irrit. 2 - H315 ≥ 5 % Eye Irrit. 2 - H319 ≥ 5 %	
	Classification: Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1 - H317, Aquatic Chronic 2 - H411	
CAS number: — EC number: 701-263-0 RRN: 01-2119454392-40-XXXX	BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE	5 - 10%
	Acute Toxicity Estimate (oral): LD <sub>50</sub> > 2000 mg/kg, Oral, Rat, Acute Toxicity Estimate (dermal): LD <sub>50</sub> > 2000 mg/kg, Dermal, Rabbit	
	Classification: Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Aquatic Chronic 2 - H411	
CAS number: 68609-97-2 EC number: 271-846-8 RRN: 01-2119485289-22-XXXX	ALKYL(C12-14) GLYCIDYL ETHER	5 - 10%
	Acute Toxicity Estimate (oral): LD <sub>50</sub> 26000 mg/kg, Oral, Rat Acute Toxicity Estimate (inhalation): LC <sub>0</sub> 0.206 mg/l, 4 hours, Dust/Mist Rat	
	Classification: Skin Irrit. 2 - H315, Skin Sens. 1 - H317	
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 RRN: 01-2119489379-17-XXXX	Titanium Dioxide	2.5 - 5%
	Carc. 2, H351	

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

**Composition comments:** The data shown are in accordance with the latest EC Directives.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information:** First aid personnel should wear appropriate protective equipment during any rescue. Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk.

**After inhalation:** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if symptoms are severe or persist.

**Injection:** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

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Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. Get medical attention.

**Skin contact:** Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if symptoms are severe or persist after washing. In the event of any sensitisation symptoms developing, ensure further exposure is avoided.

**Eye contact:** Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist after washing.

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

**Skin contact:** Causes skin irritation. May cause an allergic skin reaction. Prolonged and frequent contact may cause redness and irritation.

**Eye contact:** Causes serious eye irritation. Symptoms following overexposure may include the following: Pain or irritation. Profuse watering of the eyes. Redness.

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

**Notes for the doctor:** No specific recommendations. Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media:** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**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:** Toxic to aquatic life with long lasting effects. When heated, vapours/gases hazardous to health may be formed. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Containers can burst violently or explode when heated, due to excessive pressure build-up.

**Hazardous combustion products:** Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Phenolic. Toxic gases or vapours. Acrid smoke or fumes.

### 5.3 Advice for firefighters

**Protective actions during firefighting:** No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Contain and collect extinguishing water. Avoid the spillage or runoff entering drains, sewers or watercourses.

**Special protective equipment for firefighters:** 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:** No action shall be taken without appropriate training or involving any personal risk. Follow precautions for safe handling described in this safety data sheet. Evacuate area. Keep unnecessary and unprotected personnel away from the spillage. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Avoid inhalation of vapours and contact with skin and eyes. Do not touch or walk into spilled material.

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### 6.2 Environmental precautions:

**Environmental precautions:** Toxic to aquatic life with long lasting effects. Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

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

**Methods for cleaning up:** Toxic to aquatic life with long lasting effects. Approach the spillage from upwind. Stop leak if safe to do so. Provide adequate ventilation. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Clean contaminated objects and areas thoroughly, observing environmental regulations.

### 6.4 Reference to other sections

Reference to other sections: Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Usage precautions:** Handle all packages and containers carefully to minimise spills. Persons susceptible to allergic reactions should not handle this product. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid inhalation of vapours and contact with skin and eyes.

**Advice on general occupational hygiene:** Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Provide eyewash station and safety shower.

### 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. Avoid excessive heat for prolonged periods of time. Keep away from food, drink and animal feeding stuffs.

Store away from the following materials: Oxidising agents. Acids. Alkalis. Amines.

Store at temperatures between 5°C and 30°C.

Do not store for more than 24 months.

### 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

**Ingredient comments:** Observe any occupational exposure limits for the product or ingredients.

<i>BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE (CAS: 1675-54-3)</i>	
DNEL	Workers - Inhalation; Long term systemic effects: 4.93 mg/kg/day Workers - Dermal; Long term systemic effects: 0.75 mg/kg/day General population - Inhalation; Long term systemic effects: 0.87 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 89.3 µg/kg General population - Oral; Long term systemic effects: 0.5 mg/kg/day

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PNEC	Fresh water; 0.006 mg/l marine water; 0.001 mg/l Sediment (Freshwater); 0.341 mg/kg Sediment (Marinewater); 0.034 mg/kg STP; 10 mg/l Soil; 0.065 mg/kg/day
<b>BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE</b>	
DNEL	Workers - Dermal; Short term local effects: 0.0083 mg/cm <sup>2</sup> Workers - Dermal; Long term systemic effects: 104.15 mg/kg/day Workers - Inhalation; Long term systemic effects: 29.39 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 62.5 mg/kg/day Consumer - Inhalation; Long term systemic effects: 8.7 mg/m <sup>3</sup> Consumer - Oral; Long term systemic effects: 6.25 mg/kg/day
PNEC	Fresh water; 0.003 mg/l marine water; 0.0003 mg/l Intermittent release; 0.0254 mg/l STP; 10 mg/l Sediment (Freshwater); 0.294 mg/kg Sediment (Marinewater); 0.0294 mg/kg Soil; 0.237 mg/kg
<b>ALKYL(C12-14) GLYCIDYL ETHER (CAS: 68609-97-2)</b>	
DNEL	Workers - Dermal; Short term systemic effects: 17 mg/kg/day Workers - Inhalation; Short term systemic effects: 29 mg/kg/day Workers - Dermal; Short term local effects: 68 mg/kg/day Workers - Inhalation; Short term local effects: 9.8 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 3.9 mg/kg/day Workers - Inhalation; Long term systemic effects: 13.8 mg/kg/day Workers - Dermal; Long term local effects: 1.7 mg/kg/day Workers - Inhalation; Long term local effects: 0.98 mg/m <sup>3</sup> Consumer - Dermal; Short term systemic effects: 10 mg/kg/day Consumer - Inhalation; Short term systemic effects: 7.6 mg/m <sup>3</sup> Consumer - Oral; Short term systemic effects: 1219 mg/kg/day Consumer - Dermal; Short term local effects: 40 mg/kg/day Consumer - Inhalation; Short term local effects: 2.9 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 2.35 mg/kg/day Consumer - Inhalation; Long term systemic effects: 4.1 mg/m <sup>3</sup> Consumer - Oral; Long term systemic effects: 1 mg/kg/day Consumer - Dermal; Long term local effects: 1 mg/kg/day Consumer - Inhalation; Long term local effects: 1.46 mg/m <sup>3</sup>
PNEC	Fresh water; 0.0072 mg/l marine water; 0.00072 mg/l Sediment (Freshwater); 66.77 mg/kg Sediment (Marinewater); 6.677 mg/kg STP; 10 mg/l Soil; 80.12 mg/kg/day Intermittent release; 0.072 mg/l
<b>Titanium Dioxide</b>	
WEL	Long-term value: 10* 4** mg/m <sup>3</sup> *total inhalable **respirable

## 8.2. Exposure controls

### Protective equipment:



**Appropriate engineering controls:** Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Avoid inhalation of vapours and contact with skin and eyes. Provide eyewash station and safety shower.

**Eye/face protection:** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with Eu-

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European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Chemical splash goggles or face shield.

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. 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. To protect hands from chemicals, gloves should comply with European Standard EN374. For exposure up to 8 hours, wear gloves made of the following material: Butyl rubber. Polyethylene/Ethylene Vinyl Alcohol (PE/EVAL). Nitrile rubber. Neoprene. Polyvinyl chloride (PVC). Protective gloves should have a minimum thickness of  $\geq 0.35$  mm. Frequent changes are recommended.

**Other skin and body protection:** Wear appropriate clothing to prevent any possibility of skin contact.

**Hygiene measures:** Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Care should be taken to avoid contact with contaminants when removing contaminated clothing. Wash contaminated clothing before reuse. Provide eyewash station and safety shower.

**Respiratory protection:** Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2. EN 136/140/141/145/143/149

## SECTION 9: Physical and chemical properties

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

Appearance: Liquid.

Colour: Colourless to pale yellow.

Odour: Characteristic.

Odour threshold: No information available.

pH: No information available.

Melting point: No information available.

Initial boiling point and range:  $> 100^{\circ}\text{C}$  @ 760 mm Hg

Flash point:  $> 100^{\circ}\text{C}$  Closed cup.

Evaporation rate: No information available.

Evaporation factor: No information available.

Flammability (solid, gas): No information available.

Upper/lower flammability or explosive limits: No information available.

Other flammability: No information available.

Vapour pressure:  $< 5$  hPa @  $50^{\circ}\text{C}$

Vapour density: No information available.

Relative density: 1.12 @  $20^{\circ}\text{C}$  Calculation method.

Bulk density: No information available.

Solubility(ies): Insoluble in water.

Partition coefficient: No information available.

Auto-ignition temperature: No information available.

Decomposition Temperature: No information available.

Viscosity: 1300 mPa s @  $20^{\circ}\text{C}$  Calculation method.

Explosive properties: No information available.

Explosive under the influence of a flame: No information available.

Oxidising properties: No information available.

### 9.2. Other information

No information available.

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### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

**Reactivity:** No test data specifically related to reactivity available for this product or its ingredients.

#### 10.2 Chemical stability

**Stability:** Stable at normal ambient temperatures and when used as recommended.

#### 10.3 Possibility of hazardous reactions

**Possibility of hazardous reactions:** Under normal conditions of storage and use, no hazardous reactions will occur. Reactions with the following materials may generate heat: Amines. May polymerise.

#### 10.4 Conditions to avoid

**Conditions to avoid:** Avoid excessive heat for prolonged periods of time. Keep at temperature not exceeding 250°C. Will decompose at temperatures exceeding 350°C. Containers can burst violently or explode when heated, due to excessive pressure build-up.

#### 10.5 Incompatible materials

**Materials to avoid:** Avoid contact with the following materials: Oxidising agents. Alkalis. Acids. Amines.

#### 10.6 Hazardous decomposition products

**Hazardous decomposition products:** Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Phenolic. Toxic gases or vapours. Acrid smoke or fumes.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg): 2,000.0

Species: Rat

Notes (oral LD<sub>50</sub>): LD<sub>50</sub> > 10000 mg/kg, Oral, Rat Estimated value.

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg): 2,000.0

Species: Rabbit

Notes (dermal LD<sub>50</sub>): LD<sub>50</sub> > 5000 mg/kg, Dermal, Rabbit Estimated value.

##### Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>): No specific test data are available.

##### Skin corrosion/irritation

Skin corrosion/irritation: Causes skin irritation.

##### Serious eye damage/irritation

Serious eye damage/irritation: Causes serious eye irritation.

##### Respiratory sensitisation

Respiratory sensitisation: No information available.

##### Skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

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### **Germ cell mutagenicity**

Genotoxicity - in vitro: Inconclusive data.

Genotoxicity - in vivo: This substance has no evidence of mutagenic properties.

### **Carcinogenicity**

Carcinogenicity Based on available data the classification criteria are not met.

### **Reproductive toxicity**

Reproductive toxicity - fertility: No evidence of reproductive toxicity in animal studies.

Reproductive toxicity - development: No evidence of reproductive toxicity in animal studies.

### **Specific target organ toxicity - single exposure**

STOT - single exposure: Based on available data the classification criteria are not met.

### **Specific target organ toxicity - repeated exposure**

STOT - repeated exposure: Based on available data the classification criteria are not met.

### **Aspiration hazard**

Aspiration hazard: Based on available data the classification criteria are not met.

**Toxicokinetics:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Inhalation:** No significant hazard at normal ambient temperatures. Gas or vapour in high concentrations may irritate the respiratory system.

**Ingestion:** This product has low toxicity. No harmful effects expected from quantities likely to be ingested by accident. The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

**Skin contact:** Causes skin irritation. May cause an allergic skin reaction. Prolonged and frequent contact may cause redness and irritation.

**Eye contact:** Causes serious eye irritation. Symptoms following overexposure may include the following: Pain or irritation. Profuse watering of the eyes. Redness.

## **Toxicological information on ingredients**

### **BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE**

#### **Acute toxicity - oral**

Notes (oral LD<sub>50</sub>): LD<sub>50</sub> > 15000 mg/kg, Oral, Rat

#### **Acute toxicity - dermal**

Notes (dermal LD<sub>50</sub>): LD<sub>50</sub> 23000 mg/kg, Dermal, Rabbit

#### **Acute toxicity - inhalation**

Notes (inhalation LC<sub>50</sub>): No specific test data are available.

#### **Skin corrosion/irritation**

Skin corrosion/irritation: Causes skin irritation.

#### **Serious eye damage/irritation**

Serious eye damage/irritation: Causes serious eye irritation.

#### **Skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

#### **Germ cell mutagenicity**

Genotoxicity - in vivo: This substance has no evidence of mutagenic properties.

#### **Carcinogenicity**

Carcinogenicity: Based on available data the classification criteria are not met.

IARC carcinogenicity: IARC Group 3 Not classifiable as to its carcinogenicity to humans.

#### **Reproductive toxicity**

Reproductive toxicity - fertility: No evidence of reproductive toxicity in animal studies.

Reproductive toxicity - development: No evidence of reproductive toxicity in animal studies.

**Inhalation:** No significant hazard at normal ambient temperatures. Gas or vapour in high concentrations may irritate the respiratory system.

**Ingestion:** This product has low toxicity. No harmful effects expected from quantities likely to be ingested by accident. The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

**Skin contact:** Causes skin irritation. May cause an allergic skin reaction. Prolonged and frequent contact may



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cause redness and irritation.

**Eye contact:** Causes serious eye irritation. Symptoms following overexposure may include the following: Pain or irritation. Profuse watering of the eyes. Redness.

### **BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE**

#### **Acute toxicity - oral**

Notes (oral LD<sub>50</sub>): LD<sub>50</sub> > 2000 mg/kg, Oral, Rat

#### **Acute toxicity - dermal**

Notes (dermal LD<sub>50</sub>): LD<sub>50</sub> > 2000 mg/kg, Dermal, Rat

#### **Acute toxicity - inhalation**

Notes (inhalation LC<sub>50</sub>): No specific test data are available.

#### **Skin corrosion/irritation**

Skin corrosion/irritation: Causes skin irritation.

#### **Skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

#### **Germ cell mutagenicity**

Genotoxicity - in vitro: Based on available data the classification criteria are not met. Conclusive data but not sufficient for classification.

Genotoxicity - in vivo: This substance has no evidence of mutagenic properties.

#### **Carcinogenicity**

Carcinogenicity: Based on available data the classification criteria are not met.

#### **Reproductive toxicity**

Reproductive toxicity - fertility: Based on available data the classification criteria are not met.

Reproductive toxicity - development: Based on available data the classification criteria are not met.

#### **Specific target organ toxicity - single exposure**

STOT - single exposure: Not classified as a specific target organ toxicant after a single exposure.

#### **Specific target organ toxicity - repeated exposure**

STOT - repeated exposure: Based on available data the classification criteria are not met.

#### **Aspiration hazard**

Aspiration hazard: Not anticipated to present an aspiration hazard, based on chemical structure.

### **ALKYL(C12-14) GLYCIDYL ETHER**

#### **Acute toxicity - oral**

Notes (oral LD<sub>50</sub>): LD<sub>50</sub> 26800 mg/kg, Oral, Rat

#### **Acute toxicity - dermal**

Notes (dermal LD<sub>50</sub>): No specific test data are available.

#### **Acute toxicity - inhalation**

Notes (inhalation LC<sub>50</sub>): LC<sub>50</sub> 0.206 mg/l, 4 hour, Dust/Mist Rat. ( 0 Death. )

#### **Skin corrosion/irritation**

Skin corrosion/irritation: Causes skin irritation.

#### **Serious eye damage/irritation**

Serious eye damage/irritation: No specific test data are available.

#### **Respiratory sensitisation**

Respiratory sensitisation: No information available.

#### **Skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

#### **Germ cell mutagenicity**

Genotoxicity - in vitro: Inconclusive data.

Genotoxicity - in vivo: This substance has no evidence of mutagenic properties.

#### **Carcinogenicity**

Carcinogenicity: No information available.

#### **Reproductive toxicity**

Reproductive toxicity - fertility: No evidence of reproductive toxicity in animal studies.

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Reproductive toxicity - development: No evidence of reproductive toxicity in animal studies.

### Specific target organ toxicity - single exposure

STOT - single exposure: Based on available data the classification criteria are not met.

### Specific target organ toxicity - repeated exposure

STOT - repeated exposure: Based on available data the classification criteria are not met.

### Aspiration hazard

Aspiration hazard: Based on available data the classification criteria are not met.

Inhalation: No significant hazard at normal ambient temperatures. Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion: This product has low toxicity. No harmful effects expected from quantities likely to be ingested by accident. If large quantities are involved: May cause internal injury. The product irritates mucous membranes and may cause abdominal discomfort if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Skin contact: Causes skin irritation. May cause an allergic skin reaction. Prolonged and frequent contact may cause redness and irritation. Symptoms following overexposure may include the following: Pain. Redness. Prolonged contact may cause burns.

Eye contact: May cause eye irritation. Vapour or spray in the eyes may cause irritation and smarting. Symptoms following overexposure may include the following: Pain or irritation. Redness.

## SECTION 12: Ecological information

**Ecotoxicity:** Toxic to aquatic life with long lasting effects.

### Ecological information on ingredients

#### BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE

**Ecotoxicity:** Toxic to aquatic life with long lasting effects.

#### ALKYL(C12-14) GLYCIDYL ETHER

**Ecotoxicity:** Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

### 12.1 Toxicity

**Toxicity:** Toxic to aquatic life with long lasting effects.

### Ecological information on ingredients

#### BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE

**Toxicity:** Toxic to aquatic life with long lasting effects.

#### Acute aquatic toxicity

Acute toxicity - fish: LC<sub>50</sub>, 96 hour: 2 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates: EC<sub>50</sub>, 48 hour: 1.8 mg/l, Daphnia magna

Acute toxicity - aquatic plants: ErC50, 72 hour: 11 mg/l, Selenastrum capricornutum.

NOEC, 72 hours: 4.2 mg/l, Selenastrum capricornutum.

#### Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates: NOEC, : 0.3 mg/l, Daphnia magna

#### BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE

**Toxicity:** Toxic to aquatic life with long lasting effects.

#### Acute aquatic toxicity

Acute toxicity - fish: LC<sub>50</sub>, 96 hour: < 1 mg/l, Fish. LC<sub>50</sub>, 96 hour: 2.54 mg/l, Freshwater fish

Acute toxicity - aquatic invertebrates: EC<sub>50</sub>, 48 hour: < 10 mg/l, Daphnia magna. OECD 202

Acute toxicity - aquatic plants: EC<sub>50</sub>, < 10 mg/l, Algae. EC<sub>50</sub>, 72 hour: > 1.8 mg/l, Algae. OECD 201

Acute toxicity - microorganisms: IC<sub>50</sub>, 3 hour: > 100 mg/l, Activated sludge

#### Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates: NOEC, 21 day: 0.3 mg/l, Daphnia magna. OECD 211

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### ALKYL(C12-14) GLYCIDYL ETHER

#### Acute aquatic toxicity

Acute toxicity - fish: LC<sub>50</sub>, 96 hour: > 5000 mg/l, Oncorhynchus mykiss (Rainbow trout) LC<sub>50</sub>, 96 hour: 1800 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic plants: EyC50, 72 hour: 843 mg/l, Pseudokirchneriella subcapitata.

NOEC, 72 hour: 500 mg/l, Pseudokirchneriella subcapitata.

Acute toxicity - microorganisms: EC<sub>50</sub>, 3 hour: > 100 mg/l, Activated sludge

### 12.2 Persistence and degradability

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

#### Ecological information on ingredients

##### BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE

Persistence and degradability: The product is not readily biodegradable.

Biodegradation: - Degradation 12%: 28 day. OECD 302B.

##### BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE

Persistence and degradability: The product is not readily biodegradable.

Biodegradation: - Degradation 0%: 28 day

##### ALKYL(C12-14) GLYCIDYL ETHER

Persistence and degradability: The product is readily biodegradable.

Biodegradation: - Degradation 87%: 28 day. OECD 301F.

### 12.3 Bioaccumulative potential

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

**Partition coefficient:** No information available.

#### Ecological information on ingredients

##### BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE

Bioaccumulative potential: Potentially bioaccumulating.

Partition coefficient: log Pow: 3.242 Estimated value.

##### BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE

Bioaccumulative potential: Bioaccumulation is unlikely. BCF: 150,

Partition coefficient: log Pow: 3.6 OECD 117

##### ALKYL(C12-14) GLYCIDYL ETHER

Bioaccumulative potential: Potentially bioaccumulating. BCF: 160, Fish Estimated value.

Partition coefficient: log Pow: 3.77 OECD 107

### 12.4 Mobility in soil No further relevant information available.

**Mobility:** No information available.

#### Ecological information on ingredients

##### BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE

Mobility: Low mobility.

Adsorption/desorption coefficient: - Koc: 1800 - 4400 @ 20°C Estimated value.

##### BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE

Mobility: Low mobility.

Adsorption/desorption coefficient: Soil - Koc: 4460 @ 20°C

##### ALKYL(C12-14) GLYCIDYL ETHER

Mobility: Low mobility.

Adsorption/desorption coefficient: - Koc: > 5000 @ 20°C Estimated value. OECD 121 HPLC

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### 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. (@ >= 0.1%)

#### Ecological information on ingredients

##### **BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE**

Results of PBT and vPvB assessment: This substance is not classified as PBT or vPvB according to current EU criteria.

##### **BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE**

Results of PBT and vPvB assessment: This substance is not classified as PBT or vPvB according to current EU criteria.

##### **ALKYL(C12-14) GLYCIDYL ETHER**

Results of PBT and vPvB assessment: This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6 Other adverse effects

**Other adverse effects:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### Ecological information on ingredients

##### **BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE**

Other adverse effects: None known.

##### **ALKYL(C12-14) GLYCIDYL ETHER**

Other adverse effects: None known.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**General information:** Waste is classified as hazardous waste. Avoid discharge into drains or watercourses or onto the ground. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**Disposal methods:** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

### 14.1 UN-Number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

### 14.2 UN proper shipping name

#### **Proper shipping name (ADR/RID)**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BIS-[4-(2,3- EPOXIPROPOXI) PHENYL]PROPANE, BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE, BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE, BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE)

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### Proper shipping name (IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE, BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE, BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE, BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE)

### Proper shipping name (ICAO)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE, BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE, BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE, BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE)

### Proper shipping name (ADN)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE, BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE, BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE, BISPHENOL F DIGLYCIDYL ETHER, ISOMER MIXTURE)

### 14.3 Transport hazard class(es)

ADR/RID class: 9

ADR/RID classification code: M6

ADR/RID label: 9

IMDG class: 9

ICAO class/division: 9

ADN class: 9

### Transport labels



### 14.4 Packing group

ADR/RID packing group: III

IMDG packing group: III

ICAO packing group: III

ADN packing group: III

### 14.5 Environmental hazards

#### Environmentally hazardous substance/marine pollutant



### 14.6 Special precautions for user

EmS: F-A, S-F

ADR transport category: 3

Emergency Action Code: •3Z

Hazard Identification Number (ADR/RID): 90

Tunnel restriction code: (-)

### 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.

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### SECTION 15: Regulatory information

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

##### EU legislation

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) (as amended).

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 (as amended).

COMMISSION REGULATION (EU) 2020/878 of 18 June 2020

This product may impact SEVESO storage regulations.

##### Restrictions (Annex XVII Regulation 1907/2006)

CAUTION - Chemical may be subject to REACH RESTRICTIONS - see Annex XVII. This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3

##### Seveso Directive - Control of major accident hazards

E2

#### 15.2. Chemical safety assessment

Not applicable.

##### Inventories

Canada - DSL/NDSL: All the ingredients are listed or exempt. DSL

US - TSCA: All the ingredients are listed or exempt.

Australia - AICS: All the ingredients are listed or exempt.

Japan - ENCS: All the ingredients are listed or exempt.

Korea - KECI: All the ingredients are listed or exempt.

China - IECSC: All the ingredients are listed or exempt.

Philippines – PICCS: All the ingredients are listed or exempt.

New Zealand - NZIOC: All the ingredients are listed or exempt.

Taiwan - TCSI: All the ingredients are listed or exempt.

### SECTION 16: Other information

#### Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

CAS: Chemical Abstracts Service.

DNEL: Derived No Effect Level.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

Kow: Octanol-water partition coefficient.

LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.

LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).

PBT: Persistent, Bioaccumulative and Toxic substance.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.

vPvB: Very Persistent and Very Bioaccumulative.

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IARC: International Agency for Research on Cancer.

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.

cATpE: Converted Acute Toxicity Point Estimate.

BCF: Bioconcentration Factor.

BOD: Biochemical Oxygen Demand.

EC<sub>50</sub>: 50% of maximal Effective Concentration.

LOAEC: Lowest Observed Adverse Effect Concentration.

LOAEL: Lowest Observed Adverse Effect Level.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level.

NOEC: No Observed Effect Concentration.

LOEC: Lowest Observed Effect Concentration.

DMEL: Derived Minimal Effect Level.

EL50: Exposure Limit 50

hPa: Hectopascal

LL50: Lethal Loading fifty

OECD: Organisation for Economic Co-operation and Development

POW: Octanol-water partition coefficient

SCBA: self-contained breathing apparatus

STP: Sewage Treatment Plant

VOC: Volatile Organic Compounds

### Classification abbreviations and acronyms

Acute Tox. = Acute toxicity

Aquatic Acute = Hazardous to the aquatic environment (acute)

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

### Key literature references and sources for data

Supplier's information.

### Classification procedures according to Regulation (EC) 1272/2008

Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Aquatic Chronic 2 - H411: Calculation method. Skin Sens. 1A - H317: Expert judgement.

### Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

### Revision date

19/07/2022

### SDS status

Approved.

### Hazard statements in full

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

# SAFETY DATA SHEET (MSDS)



**Ronacrete**  
WORLD CLASS MANUFACTURER

According to 1907/2006/EC, Article 31  
**VERTICAL HIGH BUILD COMP.B**

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

### 1.1 Product identifier

Trade name: RonaFloor HB Vertical Grade

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

No further relevant information available.

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

Manufacturer/Supplier:

Ronacrete Ltd

Ronac House, Flex Meadow

Harlow, Essex, CM19 5TD

E-mail: [technical@ronacrete.co.uk](mailto:technical@ronacrete.co.uk)

Telephone: +44 1279 638700

### 1.4 Emergency telephone number:

Ronacrete Ltd

[technical@ronacrete.co.uk](mailto:technical@ronacrete.co.uk)

Telephone: +44 1279 638700

9.00am to 5.00pm Mon - Fri

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification (EC 1272/2008)

Physical hazards: Not Classified

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

Environmental hazards: Aquatic Chronic 3 - H412

### 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.

#### Precautionary statements

P273 Avoid release to the environment.



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P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.  
Rinse skin with water or shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.

### Contains

BENZYL ALCOHOL, CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER, 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2 Chemical characterisation: Mixtures

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008
			Classification
CAS number: 100-51-6 EC number: 202-859-9 RRN: 01-2119492630-38-XXXX	BENZYL ALCOHOL	25 - < 50%	Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319
CAS number: 68609-08-5 EC number: 614-657-1 RRN: 01-2119965165-33-XXXX	CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER	25 - < 50%	Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412
CAS number: 2855-13-2 EC number: 220-666-8 RRN: 01-2119514687-32-XXXX	3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE	25 - < 50%	Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412

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

**Composition comments:** The data shown are in accordance with the latest EC Directives.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information:** First aid personnel should wear appropriate protective equipment during any rescue. Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk.

**Inhalation:** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

**Ingestion:** Rinse mouth thoroughly with water. 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. Never give anything by mouth to an unconscious person. Get medical attention immediately.

# SAFETY DATA SHEET (MSDS)

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## VERTICAL HIGH BUILD COMP.B

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**Skin contact:** Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes and get medical attention. Continue to rinse. Apply a sterile dressing.

NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation. In the event of any sensitisation symptoms developing, ensure further exposure is avoided.

**Eye contact:** Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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

**Inhalation:** Gas or vapour in high concentrations may irritate the respiratory system.

**Ingestion:** Harmful if swallowed. Causes severe burns. May cause chemical burns in mouth, oesophagus and stomach.

**Skin contact:** Causes severe burns. May cause serious chemical burns to the skin. May cause an allergic skin reaction.

**Eye contact:** Causes serious eye damage. May cause chemical eye burns. May cause permanent damage if eye is not immediately irrigated.

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

**Notes for the doctor:** No specific recommendations. Treat symptomatically.

NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media:** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**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:** Harmful to aquatic life with long lasting effects. When heated, vapours/gases hazardous to health may be formed. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke.

**Hazardous combustion products:** Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Nitrous gases (NO<sub>x</sub>). Ammonia or amines.

Hydrocarbons. Aldehydes. Toxic gases or vapours. Water used for fire extinguishing, which has been in contact with the product, may be corrosive. ( Nitric acid (HNO<sub>3</sub>). )

### 5.3 Advice for firefighters

**Protective actions during firefighting:** No action shall be taken without appropriate training or involving any personal risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses. Contain and collect extinguishing water.

**Special protective equipment for firefighters:** 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:** No action shall be taken without appropriate training or involving any personal risk. Follow precautions for safe handling described in this safety data sheet. Keep unnecessary and unprotected personnel away from the spillage. Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Do not touch or walk into spilled material.

# SAFETY DATA SHEET (MSDS)

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## VERTICAL HIGH BUILD COMP.B

### 6.2 Environmental precautions

**Environmental precautions:** Harmful to aquatic life with long lasting effects. Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

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

**Methods for cleaning up:** Harmful to aquatic life with long lasting effects. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Clean contaminated objects and areas thoroughly, observing environmental regulations.

### 6.4 Reference to other sections

**Reference to other sections:** Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Usage precautions:** Handle all packages and containers carefully to minimise spills. Wear protective clothing as described in Section 8 of this safety data sheet. Persons susceptible to allergic reactions should not handle this product. Provide adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid inhalation of vapours and contact with skin and eyes.

#### **Advice on general occupational hygiene:**

Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Eye wash facilities and emergency shower must be available when handling this product.

### 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. Avoid excessive heat for prolonged periods of time. Container must be kept tightly closed when not in use. Keep away from food, drink and animal feeding stuffs. Store away from the following materials: Chemically-active metals. Acids - organic. Mineral acids. Sodium Hypochlorite Peroxides. Strong oxidising agents.

### 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

#### **BENZYL ALCOHOL (CAS: 100-51-6)**

##### **DNEL**

Industry - Inhalation; Short term systemic effects: 110 mg/m<sup>3</sup>

Industry - Inhalation; Long term systemic effects: 22 mg/m<sup>3</sup>

Industry - Dermal; Short term systemic effects: 40 mg/kg/day

Industry - Dermal; Long term systemic effects: 8 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 5.4 mg/m<sup>3</sup>

Consumer - Inhalation; Short term systemic effects: 27 mg/m<sup>3</sup>

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## VERTICAL HIGH BUILD COMP.B

Consumer - Dermal; Long term systemic effects: 4 mg/kg/day  
Consumer - Dermal; Short term systemic effects: 20 mg/kg/day  
Consumer - Oral; Long term systemic effects: 4 mg/kg/day  
Consumer - Oral; Short term systemic effects: 20 mg/kg/day

### PNEC

Fresh water; 1 mg/l  
marine water; 0.1 mg/l  
Intermittent release; 2.3 mg/l  
Soil; 0.456 mg/kg/day  
Sediment (Freshwater); 5.27 mg/kg/day  
Sediment (Marinewater); 0.527 mg/kg/day  
STP; 39 mg/l

### CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER (CAS: 68609-08-5)

#### DNEL

General population - Dermal; Long term systemic effects: 0.67 mg/kg/day  
General population - Inhalation; Short term systemic effects: 1.74 mg/m<sup>3</sup>  
Workers - Inhalation; Short term systemic effects: 9.87 mg/m<sup>3</sup>  
Workers - Dermal; Long term systemic effects: 1.87 mg/kg/day  
General population - Oral; Short term systemic effects: 0.99 mg/kg/day  
General population - Inhalation; Long term systemic effects: 0.58 mg/m<sup>3</sup>  
Workers - Inhalation; Long term systemic effects: 3.29 mg/m<sup>3</sup>  
General population - Oral; Long term systemic effects: 0.33 mg/kg/day

#### PNEC

Fresh water; 0.002 mg/l  
marine water; 0 mg/l  
Sediment (Freshwater); 10.5 mg/kg  
Sediment (Marinewater); 1.05 mg/kg  
STP; 3.1 mg/l  
Soil; 2.1 mg/kg

### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE (CAS: 2855-13-2)

**Ingredient comments:** No exposure limits known for ingredient(s).

#### DNEL

General population - Oral; Long term systemic effects: 0.526 mg/kg/day  
Workers - Inhalation; Long term local effects: 0.073 mg/m<sup>3</sup>  
Workers - Inhalation; Short term local effects: 0.073 mg/m<sup>3</sup>

#### PNEC

Fresh water; 0.06 mg/l  
marine water; 0.006 mg/l  
Intermittent release; 0.23 mg/l  
Sediment (Freshwater); 5.784 mg/kg  
Sediment (Marinewater); 0.578 mg/kg  
Soil; 1.121 mg/kg  
STP; 3.18 mg/l

## 8.2 Exposure controls

### Protective equipment



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## VERTICAL HIGH BUILD COMP.B

**Appropriate engineering controls:** Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Avoid inhalation of vapours and contact with skin and eyes. Eye wash facilities and emergency shower must be available when handling this product.

**Eye/face protection:** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Chemical splash goggles and face shield.

**Hand protection:** 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, gloves should comply with European Standard EN374. 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. The selected gloves should have a breakthrough time of at least 8 hours. It is recommended that gloves are made of the following material: Butyl rubber. Nitrile rubber. Neoprene. Polyvinyl chloride (PVC).

**Other skin and body protection:** Wear appropriate clothing to prevent any possibility of skin contact.

**Hygiene measures:** Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Care should be taken to avoid contact with contaminants when removing contaminated clothing. Wash contaminated clothing before reuse.

**Respiratory protection:** Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance: Liquid.

Colour: Light (or pale). Yellow.

Odour: Ammonia.

Odour threshold: No information available.

pH: pH (concentrated solution): 10

Melting point: No information available.

Initial boiling point and range: 205°C @ 1013 hPa

Flash point: 96°C

Evaporation rate: No information available.

Evaporation factor: No information available.

Flammability (solid, gas): No information available.

Upper/lower flammability or explosive limits: No information available.

Other flammability: No information available.

Vapour pressure: < 13.7549 hPa @ 21°C

Vapour density: No information available.

Relative density: 1.03 @ 21°C

Bulk density: No information available.

Solubility(ies): Insoluble in water.

Partition coefficient: No information available.

Auto-ignition temperature: No information available.

Decomposition Temperature: No information available.

Viscosity:

500 mm<sup>2</sup>/s @ 21°C

600 mPa s @ 21°C

Explosive properties: Not considered to be explosive.

Explosive under the influence of a flame: No information available.

Oxidising properties: Does not meet the criteria for classification as oxidising.

# SAFETY DATA SHEET (MSDS)

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## VERTICAL HIGH BUILD COMP.B

### 9.2 Other information

**Other information:** No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

**Reactivity:** See Section 10.3 (Possibility of hazardous reactions) for further information.

### 10.2 Chemical stability

**Stability:** Stable at normal ambient temperatures and when used as recommended.

### 10.3 Possibility of hazardous reactions

#### Possibility of hazardous reactions

The following materials may react violently with the product: Peroxides.

The following materials may react with the product: Chemically-active metals. Acids - organic.

Mineral acids. Sodium Hypochlorite Strong oxidising agents.

### 10.4 Conditions to avoid

**Conditions to avoid:** Avoid excessive heat for prolonged periods of time.

### 10.5 Incompatible materials

**Materials to avoid:** Avoid contact with the following materials: Sodium Hypochlorite Acids - organic. Acids.

Mineral acids. Chemically-active metals. Peroxides. Oxidising agents.

### 10.6 Hazardous decomposition products

**Hazardous decomposition products:** Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Nitrous gases (NO<sub>x</sub>). Nitric acid (HNO<sub>3</sub>). Ammonia or amines. Hydrocarbons. Aldehydes. Toxic gases or vapours. Water used for fire extinguishing, which has been in contact with the product, may be corrosive. ( Nitric acid (HNO<sub>3</sub>). )

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity - oral

Notes (oral LD<sub>50</sub>): Harmful if swallowed.

LD<sub>50</sub> ATE: > 1900 mg/kg, Oral, Estimated value.

ATE oral (mg/kg): 500.0

#### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>): LD<sub>50</sub> ATE: > 2000 mg/kg, Dermal, Rat Estimated value.

ATE dermal (mg/kg): 4,382.47

#### Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>): LC<sub>50</sub> > 5 mg/l, 4 hour, Dust/Mist Rat

**Skin corrosion/irritation:** Causes severe burns. Corrosive to skin. Skin Corr. 1C Rabbit OECD 404

**Serious eye damage/irritation:** Causes serious eye damage. Rabbit

**Respiratory sensitisation:** No information available.

**Skin sensitisation:** May cause an allergic skin reaction.

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## VERTICAL HIGH BUILD COMP.B

### Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Genotoxicity - in vivo No information available.

**Carcinogenicity:** No information available.

### Reproductive toxicity

Reproductive toxicity - fertility: No information available.

Reproductive toxicity - development: No information available.

### Specific target organ toxicity - single exposure

STOT - single exposure: No information available.

### Specific target organ toxicity - repeated exposure

STOT - repeated exposure: No information available.

**Aspiration hazard:** No information available.

**Inhalation:** Gas or vapour in high concentrations may irritate the respiratory system.

**Ingestion:** Harmful if swallowed. Causes severe burns. May cause chemical burns in mouth, oesophagus and stomach.

**Skin contact:** Causes severe burns. May cause serious chemical burns to the skin. May cause an allergic skin reaction.

**Eye contact:** Causes serious eye damage. May cause chemical eye burns. May cause permanent damage if eye is not immediately irrigated.

### Toxicological information on ingredients.

#### BENZYL ALCOHOL

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg): 1,620.0

Species: Rat

ATE oral (mg/kg): 1,620.0

##### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>): LD<sub>50</sub> 2000 mg/kg, Dermal, Rat

ATE dermal (mg/kg): 2,001.0

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l): 11.0

Species: Rat

Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l): 4,178.0

Species: Rat

ATE inhalation (vapours mg/l): 11.0

ATE inhalation (dusts/mists mg/l): 4,178.0

##### Skin corrosion/irritation

Animal data: Slightly irritating. Rabbit OECD 404

**Serious eye damage/irritation:** Irritating to eyes. OECD 405

**Respiratory sensitisation:** No information available.

##### Skin sensitisation

Skin sensitisation - Guinea pig: OECD 406 Not sensitising.

##### Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Genotoxicity - in vivo Based on available data the classification criteria are not met. OECD 474

**Carcinogenicity:** NOAEL 200 mg/kg/day, Oral, Mouse OECD 453 NOAEL > 400 mg/kg/day, Oral, Rat OECD 451

Based on available data the classification criteria are not met.

##### Reproductive toxicity

Reproductive toxicity - fertility: Based on available data the classification criteria are not met. Fertility - NOAEL 1072 mg/kg/day, Inhalation, Rat

**Specific target organ toxicity - single exposure:** STOT - single exposure Based on available data the classification criteria are not met.

**Specific target organ toxicity - repeated exposure:** STOT - repeated exposure NOAEL 400 mg/kg, Oral, Rat

**Aspiration hazard:** No information available.

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**Inhalation:** Vapour may irritate respiratory system/lungs. Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Coughing. Vapours may cause headache, fatigue, dizziness and nausea. Harmful by inhalation.

**Ingestion:** Harmful if swallowed. Nausea, vomiting. Diarrhoea. Headache. Ingestion of large amounts may cause unconsciousness.

**Skin contact:** Prolonged and frequent contact may cause redness and irritation.

**Eye contact:** Causes serious eye irritation.

### CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER

**Skin corrosion/irritation:** Causes severe burns.

**Serious eye damage/irritation:** Causes serious eye damage.

**Skin sensitisation:** May cause an allergic skin reaction.

### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

#### Acute toxicity - oral

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

Species: Rat

Notes (oral LD<sub>50</sub>):

LD<sub>50</sub> 1030 mg/kg, Oral, Rat

Harmful if swallowed. OECD 401

ATE oral (mg/kg): 1,030.0

#### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>): Harmful in contact with skin.

ATE dermal (mg/kg): 1,100.0

#### Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) LD<sub>50</sub> > 5.01 mg/l, Inhalation, Rat OECD 403

#### Skin corrosion/irritation

Causes severe burns.

Corrosive to skin. Rabbit

#### Serious eye damage/irritation

Causes serious eye damage.

Corrosive. Rabbit OECD 405

**Respiratory sensitisation:** No information available.

#### Skin sensitisation

May cause an allergic skin reaction.

Guinea pig maximization test (GPMT) - Guinea pig: Strong., Sensitising. OECD 406

#### Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo No information available.

**Carcinogenicity:** No information available.

#### Reproductive toxicity

Reproductive toxicity - fertility: Based on available data the classification criteria are not met.

Reproductive toxicity - development: Based on available data the classification criteria are not met.

#### Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

#### Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

**Aspiration hazard:** Not applicable.

**Inhalation:** May cause respiratory system irritation.

**Ingestion:** Harmful if swallowed.

**Skin contact:** Harmful in contact with skin. Causes severe burns. May cause an allergic skin reaction.

**Eye contact:** Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated.



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### SECTION 12: Ecological information

**Ecotoxicity:** Harmful to aquatic life with long lasting effects.

#### Ecological information on ingredients

##### BENZYL ALCOHOL

**Ecotoxicity:** The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

##### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

**Ecotoxicity:** Harmful to aquatic life with long lasting effects.

#### 12.1 Toxicity

**Toxicity:** Harmful to aquatic life with long lasting effects.

#### Ecological information on ingredients

##### BENZYL ALCOHOL

**Toxicity:** Not considered toxic to fish.

##### Acute aquatic toxicity

Acute toxicity - fish: LC<sub>50</sub>, 96 hours: 460 mg/l, Pimephales promelas (Fat-head Minnow). OECD 203

LC<sub>50</sub>, 96 hour: 10 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic invertebrates: EC<sub>50</sub>, 48 hours: 230 mg/l, Daphnia magna. OECD 202

Acute toxicity - aquatic plants: IC<sub>50</sub>, 72 hours: 770 mg/l, Algae. NOEC, 72 hours: 310 mg/l, Pseudokirchneriella subcapitata. OECD 201

Acute toxicity - microorganisms: IC<sub>50</sub>, 49 hours: 2100 mg/l, Activated sludge

##### Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates: NOEC, 21 days: 51 mg/l, Daphnia magna

##### CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER

**Toxicity:** Harmful to aquatic life with long lasting effects.

##### Acute aquatic toxicity

Acute toxicity - fish: LC<sub>50</sub>, 96 hour: 70.1 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates: EC<sub>50</sub>, 48 hour: 11.1 mg/l, Daphnia magna

##### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

**Toxicity:** Harmful to aquatic life with long lasting effects.

##### Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 110 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates: EC<sub>50</sub>, 48 hours: 23 mg/l, Daphnia magna

Acute toxicity - aquatic plants: EC<sub>50</sub>, 72 hours: 37 mg/l, Scenedesmus subspicatus ErC50, 72 hour: > 50 mg/l, Desmodemus subspicatus NOEC, 72 hour: 1.5 mg/l, Desmodemus subspicatus

Acute toxicity - microorganisms: EC10, 18 hour: 1120 mg/l, Pseudomonas putida.

##### Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates: NOEC, 21 day: 3 mg/l, Daphnia magna. OECD 202

#### 12.2 Persistence and degradability

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

#### Ecological information on ingredients

##### BENZYL ALCOHOL

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

##### Biodegradation:

Degradation 92 - 96%: 14 days. OECD 301C

Degradation 95 - 97%: 21 days. OECD 301A

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### CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER

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

**Biodegradation:** Degradation 0%: 28 day. OECD 301F

### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

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

**Biodegradation:**

Degradation 8%: 28 days. OECD 301A

Degradation 42%: 3 hour. OECD 303A

### 12.3 Bioaccumulative potential

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

**Partition coefficient:** No information available.

### Ecological information on ingredients.

#### BENZYL ALCOHOL

**Bioaccumulative potential:** The product does not contain any substances expected to be bioaccumulating.

**Partition coefficient:** Log Kow 1.10

### CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER

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

**Partition coefficient:** log Kow: 3.6

### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

**Bioaccumulative potential:** The product does not contain any substances expected to be bioaccumulating.

BCF: <100,

**Partition coefficient:** log Kow: 0.99

### 12.4 Mobility in soil

**Mobility:** No information available.

### Ecological information on ingredients.

#### BENZYL ALCOHOL

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

**Surface tension:** 39 mN/m @ 20°C OECD 115

### CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER

**Mobility:** No information available.

### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

**Mobility:** Semi-mobile.

**Adsorption/desorption coefficient:** Koc: 340 Estimated value.

### 12.5 Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment:** No information available.

### Ecological information on ingredients.

#### BENZYL ALCOHOL

**Results of PBT and vPvB assessment:** This substance is not classified as PBT or vPvB according to current EU criteria.

### CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER

**Results of PBT and vPvB assessment:** This substance is not classified as PBT or vPvB according to current EU criteria.

### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

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## VERTICAL HIGH BUILD COMP.B

**Results of PBT and vPvB assessment:** This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6 Other adverse effects

**Other adverse effects:** No information required.

### Ecological information on ingredients.

#### BENZYL ALCOHOL

**Other adverse effects:** Not known.

#### CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER

**Other adverse effects:** No information available.

#### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

**Other adverse effects:** Not determined.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**General information:** Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty. Avoid discharge into drains or watercourses or onto the ground. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**Disposal methods:** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

### 14.1 UN-Number

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

**UN No. (IMDG)** 2735

**UN No. (ICAO)** 2735

**UN No. (ADN)** 2735

### 14.2 UN proper Shipping name

**Proper shipping name (ADR/RID):** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE, CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER)

**Proper shipping name (IMDG):** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE, CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER)

**Proper shipping name (ICAO):** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE, CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER)

**Proper shipping name (ADN):** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE, CYCLOHEXANE METHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-, REACTION PRODUCTS WITH BISPHENOL A DIGLYCIDYL ETHER HOMOPOLYMER)

### 14.3 Transport hazard class(es)

ADR/RID class: 8

ADR/RID classification code: C7

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

### Transport labels



### 14.4 Packing group

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

### 14.5 Environmental hazards

Environmentally hazardous substance/marine pollutant: No.

### 14.6 Special precautions for user

IMDG Code segregation group: 18. Alkalis  
EmS: F-A, S-B  
ADR transport category: 3  
Emergency Action Code: 2X  
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

#### EU legislation

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) (as amended).

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 (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

#### Restrictions (Annex XVII Regulation 1907/2006)

CAUTION - Chemical may be subject to REACH RESTRICTIONS - see Annex XVII. This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3

### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

# SAFETY DATA SHEET (MSDS)

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## VERTICAL HIGH BUILD COMP.B

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### Inventories

EU - EINECS/ELINCS: All the ingredients are listed or exempt.

Canada - DSL/NDSL: All the ingredients are listed or exempt. DSL

US - TSCA: All the ingredients are listed or exempt.

Australia - AICS: All the ingredients are listed or exempt.

Japan - ENCS: All the ingredients are listed or exempt.

Korea - KECI: All the ingredients are listed or exempt.

China - IECSC: All the ingredients are listed or exempt.

Philippines – PICCS: All the ingredients are listed or exempt.

New Zealand - NZIOC: All the ingredients are listed or exempt.

Taiwan - TCSI: All the ingredients are listed or exempt.

## SECTION 16: Other information

### 16.1 Other information

#### Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

CAS: Chemical Abstracts Service.

DNEL: Derived No Effect Level.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

Kow: Octanol-water partition coefficient.

LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.

LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).

PBT: Persistent, Bioaccumulative and Toxic substance.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.

vPvB: Very Persistent and Very Bioaccumulative.

IARC: International Agency for Research on Cancer.

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.

cATpE: Converted Acute Toxicity Point Estimate.

BCF: Bioconcentration Factor.

BOD: Biochemical Oxygen Demand.

EC<sub>50</sub>: 50% of maximal Effective Concentration.

LOAEC: Lowest Observed Adverse Effect Concentration.

LOAEL: Lowest Observed Adverse Effect Level.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level.

NOEC: No Observed Effect Concentration.

LOEC: Lowest Observed Effect Concentration.

DMEL: Derived Minimal Effect Level.

EL50: Exposure Limit 50

hPa: Hectopascal

LL50: Lethal Loading fifty

OECD: Organisation for Economic Co-operation and Development

POW: Octanol-water partition coefficient

SCBA: self-contained breathing apparatus

STP: Sewage Treatment Plant

VOC: Volatile Organic Compounds

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### Classification abbreviations and acronyms:

Acute Tox. = Acute toxicity

Aquatic Acute = Hazardous to the aquatic environment (acute)

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

**Key literature references and sources for data:** Supplier's information.

### Hazard statements in full

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.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.