Revision Date 07.11.2018 Revision: 1

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

1.1 Product identifier

Trade name: Unisorb Hi-Temp V-100 Epoxy Grout

Label name: Hi-Temp Grout Resin

1.2 Application of the substance / the mixture: Epoxy grout

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:



Unisorb Installation Technologies

www.unisorb.com

Box 1000 Jackson, MI 49204-1000 888-4-UNISORB-Fax 517-764-5607 ISO – 9001: 2000 Certified

#### 1.4 Emergency telephone number:

ChemTel Inc.

(800) 255-3924, +1 (813) 248-0585

#### 2 Hazards identification

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

Skin Irritant 2; H315: Causes skin irritation.

Eye Irritant 2; H319: Causes serious eye irritation.

Skin Sensitizer 1; H317: May cause and allergic skin reaction.

#### 2.2 GHS Label elements

#### Hazard pictograms/symbols



Signal word: Warning

#### **Hazard statements:**

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H317: May cause and allergic skin reaction.

### **Precautionary statements:**

P280: wear protective gloves / eye protection.

P273: Avoid release to the environment.

P264: Wash thoroughly after handling.

P261: Avoid breathing mist/vapours/spray.

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.

P337+P313: If eye irritation persists: Get medical advice/attention.

Additional information: Contains epoxy constituents. May produce an allergic reaction.

**HMIS Rating:** 

Health: 2 Flammability: 1 Physical Hazard: 0

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# 3 Composition/information on ingredients

#### 3.2 Mixture

**Description:** Substance listed below with nonhazardous additions possible.

Dangero	ous components:	·	
CAS: 25	068-38-6	Reaction product: bisphenol - A- (epichlorhydrin) epoxy resin	30-60%
		(number average molecular weight < 700)	

#### 4 First aid measures

#### 4.1 Description of first aid measures

**General information:** Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Take affected persons out into the fresh air

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately rinse with water. If skin irritation continues, consult a doctor.

**After eye contact:** Remove contact lenses if worn, if possible. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**After swallowing:** Rinse out mouth and then drink plenty of water. Do not Induce vomiting; call for medical help immediately. **4.2 Most important symptoms and effects, both acute and delayed:** Allergic reactions, Nausea, Coughing, Gastric or intestinal disorders, Irritant to skin and mucous membranes, Irritant to eyes.

**4.3 Indication of any immediate medical attention and special treatment needed:** Contains reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700), Reaction May produce an allergic reaction. If necessary oxygen respiration treatment. Later observation for pneumonia and pulmonary edema. Medical supervision for at least 48 hours.

# **5 Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing agents: Water haze or fog. Foam. Fire-extinguishing powder. Carbon dioxide.

For safety reasons unsuitable extinguishing agents: Water with full jet, Water spray

**5.2 Special hazards arising from the substance or mixture:** Formation of toxic gases is possible during heating or in case of fire.

#### 5.3 Advice for the firefighters

Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.

Additional information: Cool endangered receptacles with water fog or haze. Eliminate all ignition sources if safe to do so.

### 6 Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures:** Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case of seepage into water course or sewage system. Prevent from spreading (e.g. by damming–in or oil barriers).
6.3 Methods and material for containment and cleaning up: Absorb liquid components with liquid-binding material. Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

# 7 Handling and storage

**7.1 Precautions for safe handling:** Use only in well-ventilated areas. Store in cool, dry place in tightly closed receptacles. **7.2 Conditions for safe storage, including any incompatibilities:** Use only receptacles specifically permitted for this substance/product. Avoid storage near extreme heat, ignition sources or open flame.

Further Information about storage conditions: Keep container tightly sealed. Store in an area with adequate ventilation.

Revision Date 07.11.2018 Revision: 1

### 8 Exposure controls/personal protection

#### 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**DNELs:** No further relevant information available. **PNECs:** No further relevant information available.

Additional information: The lists valid during the making were used as basis.

8.2 Engineering controls Provide readily accessible eye wash stations and safety showers. Provide ventilation adequate to ensure concentrations are minimized.

#### 8.3 Personal protective equipment

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory protective device in case of insufficient ventilation. For spills, respiratory protection may be advisable. Use respiratory protection when grinding or cutting material.

Hand protection: Protective, impervious gloves. (Neoprene, PVC, Nitrile rubber) The glove material has to be impermeable and resistant to the product / the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

No data available

Eye protection: Safety glasses with side shields. Contact lenses should not be worn.

Skin and Body protection: Protective work clothing. Where potential exposure warrants, rubber or plastic boots and chemically resistant protective suit.

# 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**General Information** 

**Appearance** 

Form: Viscous Liquid

Colour: Tan Odour: Sweet

Odour threshold: No data available pH: Melting point/range: No data available >392 °F / >200 °C Boiling point/range: Flash point: >302 °F / >150 °C **Evaporation rate:** No data available Flammability (solid, gaseous): Not applicable Upper/lower flammability or explosive limit: Not applicable Vapor pressure: No data available Vapor density: No data available Relative Density at 20°C: 1.74 g/cm<sup>3</sup>

Solubility in / Miscibility with

Not miscible or difficult to mix. Water:

Partition coefficient (n-octanol/water): No data available Auto/Self-ignition temperature: No data available **Decomposition temperature:** No data available **Viscosity** 70,000 - 140,000 cps

### 10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

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**10.3 Possibility of hazardous reactions:** Reacts with strong alkali. Exothermic polymerization. Reacts with strong acids and oxidizing agents. Reacts with catalysts.

10.4 Conditions to avoid: Avoid contact with strong oxidizing agents, excessive heat or flames.

**10.5 Incompatible materials:** Strong acids, bases and oxidizing agents.

10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide.

# 11 Toxicological information

11.1 Information on likely routes of exposure:

Inhalation: May cause respiratory irritation

Ingestion: No data

Skin contact: May cause skin irritation
Eye contact: May cause eye irritation

11.2 Symptoms related to physical, chemical and toxicological characteristics: No available data

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure:

(Data for primary component, Reaction product: bisphenol - A- (epichlorhydrin) epoxy resin)

Acute toxic:

Oral LD50 > 2,000 mg/kg (rat) Dermal LD50 > 2,000 mg/kg (rat)

Inhalation No data

Skin Corrosive/irritant:

Test material was slightly irritating to skin in key studies. For the skin, mean erythema and edema scores were 0.8 and 0.5 respectively.

Serious eye damage/eye irritation:

Test material was slightly irritating to the eye in key studies. The mean eye score was 0.4

Respiratory sensitization: No data available

Skin sensitization:

In a local lymph node assay, the concentration that would cause a 3-fold increase in proliferation (EC-3) was calculated to be 5.7% which is consistent with moderate dermal sensitization potential.

11.4 Numerical measures of toxicity: No data available for mixture.

**Additional toxicological information:** The product show the following dangers according to the calculation method of the General EU, Classification Guidelines for Preparations as issued in the latest version: Irritant, Danger through skin absorption. Toxic and /or corrosive effects may be delayed up to 24 hours. Inhalation of concentrated vapours as well as oral intake will lead to anesthesia-like conditions and headache, dizziness ,etc.

### 12 Ecological information

#### 12.1 Toxicity

### Aquatic toxicity:

(Data taken from SDS of primary component, Reaction product: bisphenol - A- (epichlorhydrin) epoxy resin)

Fish 96hr-LC50 = 3.6mg/L test mat. Oncorhynchus mykiss

(direct application, nominal) (OECD Guideline 203)

LC50 1.41 mg/L 96hr Oryzias latipes

Crustacea 48hr-EC50 = 2.8mg/L test mat *Daphnia magna* 

(direct application, nominal, based on: mobility) (OECD Guideline 202)

EC50 1.7mg/L 48hr

Aquatic Plant 72hr-EC50 > 11 mg/L Scenedesmus capricornutum

water soluble fraction (meas. (arithm. mean)) based on: growth rate (EPA-660/3-75-009)

**12.2 Persistence and degradability:** No data available.

12.3 Bioaccumulative potential: No further relevant information available.

**12.4 Mobility in soil:** No further relevant information available.

12.5 Results of PBT and vPvB assessment:

**PBT:** Not applicable. **vPvB:** Not applicable.

**12.6 Other adverse effects:** No further relevant information available.

Revision Date 07.11.2018 Revision: 1

### 13 Disposal considerations

13.1 Waste treatment methods

Waste from residue/unused product: This product should not be allowed to enter drains, water courses or the soil.

Dispose of this material in a safe manner and in accordance with federal, state and local regulations

Contaminated packaging: Disposal must be made in accordance with official federal, state and local regulations.

# **14 Transport information**

DOT

IATA

UN number: Not Regulated

UN number:

Not Regulated

**IMDG** 

UN number: Not Regulated

**TDG** 

UN number: Not Regulated

### 15 Regulatory Information

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

**United States (USA)** 

#### **SARA**

Section 355 (extremely hazardous substances):
None of the ingredients is listed.
Section 313 (Specific toxic chemical listings):
Component(s) above 'de minimus' level: None
TSCA /Toxic Substances Control Act):

All the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer: None

#### Canada

A	D 1! -	C	Light /DOLA.
Canadian	Domestic	Substances	LIST (DSL):

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

**15.2 Chemical Safety assessment:** A Chemical Safety Assessment has not been carried out.

#### **16 Other information**

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.

#### Abbreviation and acronyms:

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienist.

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EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substance CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada)

Revision Date 07.11.2018 Revision: 2

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

1.1 Product identifier

Trade name: Unisorb Hi-Temp V-100 Epoxy Grout

Label name: Hi-Temp Grout Hardener

1.2 Application of the substance / the mixture: Epoxy grout

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:



Unisorb Installation Technologies

www.unisorb.com Box 1000 Jackson, MI 49204-1000 888-4-UNISORB-Fax 517-764-5607 ISO – 9001: 2000 Certified

#### 1.4 Emergency telephone number:

ChemTel Inc.

(800) 255-3924, +1 (813) 248-0585

### 2 Hazards identification

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

Acute toxicity - Oral Category 4 Acute toxicity - Dermal Category 4 Skin corrosion - Category 1B Skin sensitization - Category 1

#### 2.2 GHS Label elements

#### Hazard pictograms/symbols



Signal word: Danger

#### Hazard statements:

H302+H312: Harmful if swallowed or in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

#### **Precautionary statements:**

P202: Do not handle until all safety precautions have been read and understood.

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

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 :IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTRE or doctor/physician.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

Additional information: Corrosive, Severe skin irritant, Severe eye irritant, May cause sensitization by skin contact.

**HMIS Rating:** 

Health: 3 Flammability: 1 Physical Hazard: 0

Revision Date 07.11.2018 Revision: 2

# 3 Composition/information on ingredients

3.2 Mixture

**Description:** Mixture of substances listed below with potential nonhazardous additions.

Dangerous components:CAS: 112-24-3Triethylenetetramine60-100%

### 4 First aid measures

### 4.1 Description of first aid measures

**General information:** Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately.

**After eye contact:** Rinse immediately with plenty of water for at least 15 minutes. If symptoms persist, consult a doctor. **After ingestion:** Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side. Do not Induce vomiting; call for medical help immediately.

- **4.2 Most important symptoms and effects, both acute and delayed:** Repeated and/or prolonged exposures to low concentrations of vapors or aerosols may cause: sore throat, asthma, eye disease, kidney disorders, liver disorders, skin disorders and allergies.
- **4.3 Indication of any immediate medical attention and special treatment needed:** NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

# 5 Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing agents: Foam, Fire-extinguishing powder, Carbon dioxide.

**5.2 Specific hazards arising from the substance or mixture:** May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

5.3 Advice for the firefighters

Protective equipment: Wear self-contained respiratory protective device, Wear fully protective suit.

Additional information: Cool endangered receptacles with water fog or haze, Eliminate all ignition sources if safe to do so.

### 6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures:** Use respiratory protective device against the effects of fumes/dust/aerosol, Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources.
- **6.2 Environmental precautions:** Do not allow to enter sewers/surface or ground water. Inform respective authorities in case of seepage into water course or sewage system. Prevent from spreading (e.g. by damming–in or oil barriers).
- **6.3 Methods and material for containment and cleaning up:** Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

### 7 Handling and storage

- 7.1 Precautions for safe handling: Use only in well-ventilated areas. Store in cool, dry place in tightly closed receptacles (60-80°F recommended)
- (60-80°F recommended).

  7.2 Conditions for safe storage, including any incompatibilities: Use only receptacles specifically permitted for this substance/product. Avoid storage near extreme heat, ignition sources or open flame.

Further Information about storage conditions: Keep container tightly sealed. Store in an area with adequate ventilation.

# 8 Exposure controls/personal protection

#### 8.1 Control parameters

**Exposure Limits:** 

Triethylenetetramine	Time Weighted Average (TWA): WEEL	1 ppm	6 mg/m3
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**8.2 Engineering controls** Provide readily accessible eye wash stations and safety showers. Provide ventilation adequate to ensure concentrations are minimized.

#### 8.3 Personal protective equipment

**General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory protective device in case of insufficient ventilation. For spills, respiratory protection may be advisable. Use respiratory protection when grinding or cutting material.

**Hand protection:** Protective, impervious gloves. (Neoprene, Butyl-rubber, Nitrile rubber) The glove material has to be impermeable and resistant to the product / the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection: Face shield with safety glasses or goggles underneath. Contact lenses should not be worn.

**Skin and Body protection:** Protective work clothing. Where potential exposure warrants, rubber or plastic boots and chemically resistant protective suit.

# 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

**General Information** 

**Appearance** 

Form: Liquid
Colour: Blue
Odour: Amine

Odour threshold: No data available

pH: Alkaline

Melting point/range: No data available Boiling point/range: >350 °F / >176 °C >200 °F / >93 °C Flash point: **Evaporation rate:** No data available Flammability (solid, gaseous): Not applicable Upper/lower flammability or explosive limit: Not applicable Vapor pressure: No data available Vapor density: No data available Relative Density at 20°C: 0.97 g/cm3

Solubility in / Miscibility with

Water: Soluble

Partition coefficient (n-octanol/water):No data availableAuto/Self-ignition temperature:No data availableDecomposition temperature:No data availableViscosity15 - 35 cps

# 10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

**10.3 Possibility of hazardous reactions:** Reacts with strong alkali. Exothermic polymerization. Reacts with strong acids and oxidizing agents. Reacts with catalysts.

**10.4 Conditions to avoid:** Avoid contact with strong oxidizing agents, excessive heat or flames.

**10.5 Incompatible materials:** Strong acids, bases and oxidizing agents.

**10.6 Hazardous decomposition products:** Nitric acid, Ammonia, Nitrogen oxides (NOx), Nitrogen oxide can react with water vapors to form corrosive nitric acid, Carbon monoxide, Carbon dioxide (CO2), Aldehydes, Flammable hydrocarbon fragments.

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# 11 Toxicological information

11.1 Information on likely routes of exposure:

Skin contact: Harmful in contact with skin. Causes skin burns.

Eye contact: Causes eye burns.

Ingestion: Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of

perforation of the esophagus and the stomach.

Inhalation: Can cause severe eye, skin and respiratory tract burns.

11.2 Symptoms related to physical, chemical and toxicological characteristics: No data available.

**11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure:** This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. May cause allergic skin reaction. This product may cause adverse reproductive effects. Eye disease, Skin disorders and Allergies.

11.4 Numerical measures of toxicity: No data is available for full mixture.

# 12 Ecological information

**12.1 Aquatic toxicity:** No data available on the product itself.

12.2 Persistence and degradability: No data available.

12.3 Bioaccumulative potential: No data available on the product itself.

**12.4 Mobility in soil:** No data available.

12.5 Other adverse effects: No further relevant information available.

### 13 Disposal considerations

13.1 Waste treatment methods

Waste from residue/unused product: This product should not be allowed to enter drains, water courses or the soil.

Dispose of this material in a safe manner and in accordance with federal, state and local regulations

Contaminated packaging: Disposal must be made in accordance with official federal, state and local regulations.

### **14 Transport information**

DOT

UN number: UN2735

**Proper Shipping Name:** Amines, liquid, corrosive, n.o.s., (Triethylenetetramine)

Hazard Class: 8
Packing Group: || Labels(s): 8
Marine Pollutant: No

**IATA** 

UN number: UN2735

**Proper Shipping Name:** Amines, liquid, corrosive, n.o.s., (Triethylenetetramine)

Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: No

**IMDG** 

UN number: UN2735

**Proper Shipping Name:** Amines, liquid, corrosive, n.o.s., (Triethylenetetramine)

Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: No

**TDG** 

UN number: UN2735

**Proper Shipping Name:** Amines, liquid, corrosive, n.o.s., (Triethylenetetramine)

Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: No

Revision Date 07.11.2018 Revision: 2

# 15 Regulatory Information

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

Toxic Substance Control Act (TSCA) 12(b) Component(s): None.

Country	Regulatory list	Notification
USA	TSCA	Included on Inventory.
EU	EINECS	Included on EINECS inventory or
		polymer substance, monomers
		included on EINECS inventory or
		no longer polymer.
Canada	DSL	Included on Inventory.
Australia	AICS	Included on Inventory.
Japan	ENCS	Included on Inventory.
South Korea	ECL	Included on Inventory.
China	SEPA	Included on Inventory.
Philippines	PICCS	Included on Inventory.

#### SARA

Section 355 (extremely hazardous substances):
None of the ingredients is listed.
Section 313 (Specific toxic chemical listings):
Component(s) above 'de minimus' level: None
TSCA (Toxic Substances Control Act):
All the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer: None

15.2 Chemical Safety assessment: A Chemical Safety Assessment has not been carried out.

#### **16 Other information**

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.

### Abbreviation and acronyms:

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienist.

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substance

CAS: Chemical Abstracts Service (division of the American Chemical Society)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)