

Safety Data Sheet

1. Product Name: Resiloc Binder – Base Component
Classified as Hazardous

Identification

Company Name Aitken Freeman Pty Ltd
Address Unit 7, 7 – 9 Brough St. Springvale Vic 3171
Contact: Ph. (03) 9701 3955 Fx. (03) 9701 3956

2. Hazard Identification:

GHS Classification Skin corrosion/irritation - Category 2
Skin sensitisation - Sub-category 1B
Acute aquatic toxicity - Category 2
Chronic aquatic toxicity - Category 2

Signal Word Hazard
Hazard Statement Causes skin irritation.
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects.
Pictogram(s) Exclamation mark, Environmental

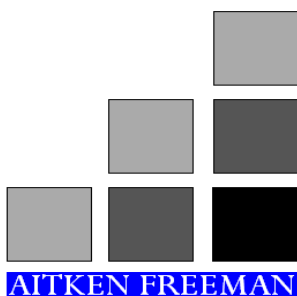


Precautionary Statements

Prevention Read label before use.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash skin thoroughly after handling.
Contaminated work clothing should not be allowed out of the work place.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.

Response Collect spillage.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash before re-use.

Disposal Dispose of contents/container to approved waste disposal plant



3. Composition / information on ingredients

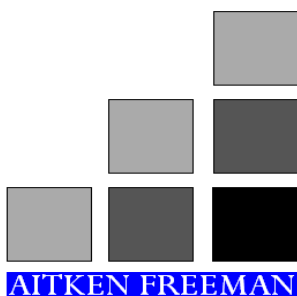
Ingredients	Name	CAS	Proportion
	Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-polymers	25085-99-8	+60%
	Diglycidyl ether of phenol - formaldehyde polymer	28064-14-4	10 – 30%
	C12 – C14 glycidyl ether	68609-97-2	10 – 30%

4. First Aid Measures

Inhalation	If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms persist seek medical attention.
Ingestion	Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.
Skin	Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before re-use or discard. Seek medical attention.
Eye contact	If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.
First Aid Facilities	Eye wash, safety shower and normal washroom facilities.
Advice to Doctor	Treat symptomatically.
Other information	For advice in an emergency, contact a Poisons Information Centre, 13 11 26, or a doctor at once.

5. Fire fighting measures

Suitable Extinguishing media	Use carbon dioxide, dry chemical, foam or water mist.
Unsuitable Extinguishing media	DO NOT use water jets.
Hazards from Combustion Products	Under fire conditions this product may emit toxic/irritating fumes including carbon monoxide and carbon dioxide.
Specific Hazards arising from the ingredients	Combustible liquid. This product will readily burn under fire conditions.
Hazchem Code	3Z
Precautions in	Fire fighters should wear full protective clothing and self contained breathing



connection with fire apparatus operated in positive pressure mode. Water spray may be used to keep fire exposed containers cool.

6. Accidental Release Measures

Emergency Procedures Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Place inert absorbent, non-combustible material on to spillage. Use clean non sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs, inform the local water and waste management authorities in accordance with local regulations.

7. Handling and storage

Precautions for safe Handling Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Avoid inhalation of vapours and mists, and skin or eye contact. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene. ie. Washing hands prior to eating, drinking, smoking or using toilet facilities.

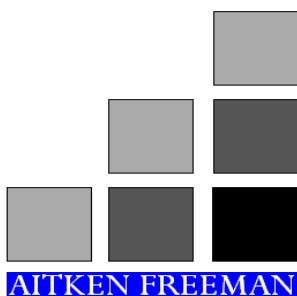
Conditions for safe storage, including any Incompatibilities Store in a cool, dry, well ventilated area away from heat, sources of ignition, oxidising agents, food stuffs, and clothing, and out of direct sunlight. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Do not pressurise, cut, heat, or weld containers as they may contain hazardous residues. For information on the design of the store room, reference should be made to Australian Standard AS1940 – The storage of flammable and combustible liquids. Reference should also be made to all state and federal regulations.

8. Exposure Controls

Occupational exposure limit values No exposure standards have been established for this material by Safework Australia. However as with all chemicals, exposure should be kept to the lowest possible levels.

Biological limit values No biological limit allocated
Appropriate engineering controls Use with good ventilation. If mists or vapours are produced, local exhaust ventilation should be used.

Respiratory protection If engineering controls are not effective in controlling airbourne exposure then an approved respirator with a replaceable organic vapour filter should be used. Reference should be made to Australian standards AS 1715, Selection, Use, and Maintenance of Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.



Eye Protection

Safety glasses with side shields or chemical goggles should be worn. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform with Australian Standard AS 1337 – Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. Final choice of appropriate gloves will vary with individual circumstances ie methods of handling or according to risk assessments undertaken. Reference should be made to AS2161.1 Occupational protective gloves – Selection, Use, and Maintenance.

Body Protection

Suitable protective work wear, EG Cotton overalls buttoned at the neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. Physical and Chemical Properties

Form:	Lightly coloured clear liquid
Solubility:	Not miscible with water
Specific Gravity (20°C):	1.12
Relative Vapour Density (air=1):	>1
Vapour Pressure (kPa @ 20°C):	Not Available
Flash Point (°C):	> 150°C
Flammability Limits (%):	Not Applicable
Autoignition Temperature (°C):	400°C
% Volatile by Volume:	Not Applicable
Melting Point/Range (°C):	Not Available
Boiling Point/Range (°C):	Not Available
pH:	Neutral
Viscosity:	700 – 1100 cps

10 Stability and Reactivity

Chemical Stability

Unstable in the presence of incompatible materials See below

Possibility of Hazardous Reactions

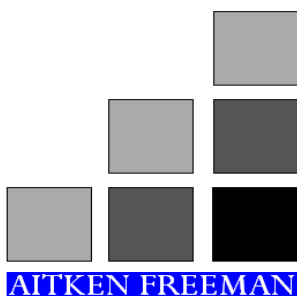
may polymerise in contact with heat, organic and inorganic free radical producing initiators
 may polymerise with evolution of heat in contact with oxidisers, strong acids, bases and amines
 may react violently with strong oxidisers, permanganates, peroxides, acyl halides, alkalis, ammonium persulfate, bromine dioxide
 may attack some forms of plastics, coatings, and rubber
 Avoid reaction with oxidising agents

Conditions to Avoid

Contact with any of the above

Hazardous Decomposition Products

Carbon monoxide



11 Toxicological Information

Inhaled

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Not normally a hazard due to non-volatile nature of product

Ingestion

High molecular weight material; on single acute exposure would be expected to pass through gastrointestinal tract with little change / absorption.

Skin Contact

The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

Open cuts, abraded or irritated skin should not be exposed to this material

Eye

Chronic

May produce eye irritation in some persons and produce eye damage

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Toxic: danger of serious damage to health by prolonged exposure through inhalation.

Toxicity

Not available

12 Ecological Information

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

Significant environmental findings are limited. Oxiranes (including glycidyl ethers and alkyl oxides, and epoxides) exhibit common characteristics with respect to environmental fate and ecotoxicology.

13 Disposal Considerations

Product / Packaging

Disposal

Containers may still present a chemical hazard/ danger when empty.

Legislation addressing waste disposal requirements may differ by state and/ or territory. Each user must refer to laws operating in their area.

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

DO NOT allow wash water from cleaning or process equipment to enter drains.

It may be necessary to collect all wash water for treatment before disposal.

In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

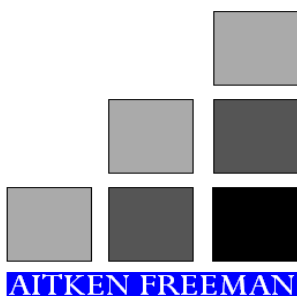
Where in doubt contact the responsible authority.

Recycle wherever possible or consult manufacturer for recycling options.

Consult State Land Waste Authority for disposal.

Bury or incinerate residue at an approved site.

Recycle containers if possible, or dispose of in an authorised landfill.



14 Transport Information

Labels Required



Land Transport

UN No. 3082

Proper Shipping Name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/epichlorohydrin resin)

Transport Hazard Class

Class 9

Packing Group

III

Environmental Hazard

Not Applicable

Hazchem

3Z

15 Regulatory Information

Safety, health and environmental regulations / legislation specific for the substance or mixture
BISPHENOL A/ DIGLYCIDYL ETHER POLYMER, HIGH MOLECULAR WEIGHT(25068-38-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists Australia Inventory of Chemical Substances (AICS)

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (bisphenol A/ diglycidyl ether polymer, high molecular weight)
China - IECSC	Y
Europe - EINEC / ELINCS /NLP	Y
Japan - ENCS	N (bisphenol A/ diglycidyl ether polymer, high molecular weight)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y

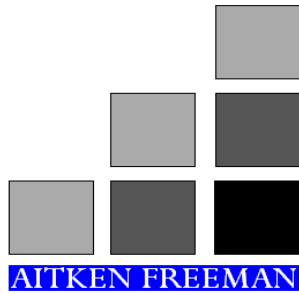
Legend:

Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt

16 Other Information

Classification of the preparation and its individual components has drawn on official and authoritative sources using available literature references.

Revision date 21st October 2020



Safety Data Sheet

1. Product Name: Resiloc Binder – Hardener Component
Classified as Hazardous

Identification

Company Name Aitken Freeman Pty Ltd
Address Unit 7, 7 – 9 Brough St. Springvale Vic 3171
Contact: Ph. (03) 9701 3955 Fx. (03) 9701 3956

2. Hazard Identification:

GHS Classification

Acute Tox.	4 (oral)	Acute toxicity
Acute Tox.	4 (dermal)	Acute toxicity
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Skin Sens.	1A	Skin sensitization
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic

Signal Word Danger

Hazard Statement

Harmful in contact with skin.
Harmful if swallowed.
May cause an allergic skin reaction.
Causes severe skin burns and eye damage.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

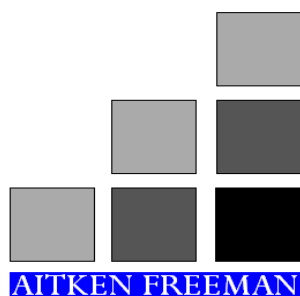
P280 Wear protective gloves/clothing/eye protection/face protection
P260 Do not breathe dust or mist.
P273 Avoid release to the environment.
P272 Contaminated work clothing should not be allowed out of the workplace.
P270 Do not eat, drink or smoke when using this product.
P264 Wash with plenty of water and soap thoroughly after handling

Precautionary Statements (Response):

P310 Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P361 + P364 Take off immediately all contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

P405 Store locked up.



Pictogram(s)



3. Composition / information on ingredients

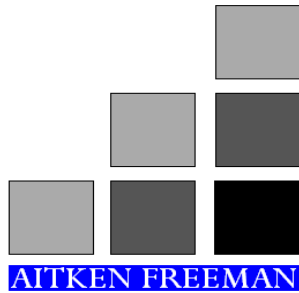
Ingredients Name	CAS	Proportion
3-aminomethyl-3,5,5- trimethylcyclohexylamine	2855-13-2	30 – 60 %
Benzyl alcohol	100-51-6	30 – 60 %
2-hydroxybenzoic acid	69-72-7	0 – 10 %
Tris-2,4,6-(dimethylaminomethyl) phenol	90-72-2	10 – 30 %

4. First Aid Measures

Inhalation	If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms persist seek medical attention.
Ingestion	Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.
Skin	Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before re-use or discard. Seek medical attention.
Eye contact	If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.
First Aid Facilities	Eye wash, safety shower and normal washroom facilities.
Advice to Doctor	Treat symptomatically.
Other information	For advice in an emergency, contact a Poisons Information Centre, 13 11 26, or a doctor at once.

5. Fire fighting measures

Suitable Extinguishing media	Use carbon dioxide, dry chemical, alcohol resistant foam, or water mist.
Unsuitable Extinguishing media	DO NOT use water jets.
Hazards from Combustion Products	Under fire conditions this product may emit toxic/irritating fumes including carbon monoxide, carbon dioxide and oxides of nitrogen.
Specific Hazards arising from the ingredients	Combustible liquid. This product will readily burn under fire conditions.



Hazchem Code •3Z

Precautions in connection with fire Fire fighters should wear full protective clothing and self contained breathing apparatus operated in positive pressure mode. Water spray may be used to keep fire exposed containers cool.

6. Accidental Release Measures

Emergency Procedures Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Place inert absorbent, non-combustible material on to spillage. Use clean non sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs, inform the local water and waste management authorities in accordance with local regulations.

7. Handling and storage

Precautions for safe Handling Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Avoid inhalation of vapours and mists, and skin or eye contact. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene. ie. Washing hands prior to eating, drinking, smoking or using toilet facilities.

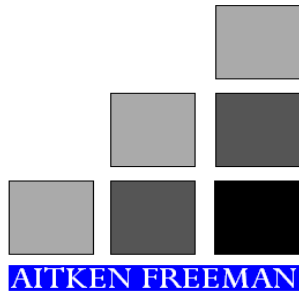
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8. Exposure Controls

Occupational exposure limit values No exposure standards have been established for this material by Safework Australia. However as with all chemicals, exposure should be kept to the lowest possible levels.

Biological limit values No biological limit allocated
Appropriate engineering controls Use with good ventilation. If mists or vapours are produced, local exhaust ventilation should be used.

Respiratory protection If engineering controls are not effective in controlling airbourne exposure then an approved respirator with a replaceable organic vapour filter should be used. Reference should be made to Australian standards AS 1715, Selection, Use, and Maintenance of Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.



- Eye Protection** Safety glasses with side shields or chemical goggles should be worn. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform with Australian Standard AS 1337 – Eye Protectors for Industrial Applications.
- Hand Protection** Wear gloves of impervious material. Final choice of appropriate gloves will vary with individual circumstances ie methods of handling or according to risk assessments undertaken. Reference should be made to AS2161.1 Occupational protective gloves – Selection, Use, and Maintenance.
- Body Protection** Suitable protective work wear, EG Cotton overalls buttoned at the neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. Physical and Chemical Properties

Form:	Clear liquid with strong ammoniacal odour
Solubility:	Not miscible with water
Specific Gravity (20°C):	0.96 – 0.98
Relative Vapour Density (air=1):	Not Available
Vapour Pressure (kPa @ 20°C):	Not Available
Flash Point (°C):	> 96°C
Flammability Limits (%):	Not Applicable
Autoignition Temperature (°C):	Not Available
% Volatile by Volume:	Not Applicable
Melting Point/Range (°C):	Not Available
Boiling Point/Range (°C):	Not Available
pH:	Neutral
Viscosity:	100 - 300 cps

10 Stability and Reactivity

Possibility of hazardous reactions

The product is chemically stable.
Exothermic reaction. Reacts with acids.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. See MSDS section 7 - Handling and storage.

Incompatible materials

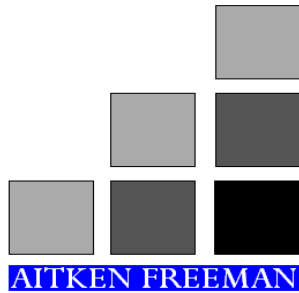
strong oxidizing agents, acids, halogenated compounds
acids

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxides

11 Toxicological Information

- Inhaled** The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
Not normally a hazard due to non-volatile nature of product
- Ingestion** High molecular weight material; on single acute exposure would be expected to pass through gastrointestinal tract with little change / absorption.
- Skin Contact** The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
Open cuts, abraded or irritated skin should not be exposed to this material



**Eye
Chronic**

May produce eye irritation in some persons and produce eye damage
 Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.
 Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.
 Toxic: danger of serious damage to health by prolonged exposure through inhalation.

Toxicity

Not available

**12 Ecological Information
Toxicity**

Benzyl alcohol	>658 mg/l (<i>Pseudomonas putida</i>) (EC50(16h)) 71.42 mg/l (<i>Photobacterium phosphoreum</i>) (EC50(0,5h)) 400 mg/l (<i>Pseudomonas putida</i>) (EC50(0,5h))
<i>Daphnia</i> toxicity	400 mg/l (<i>Daphnia magna</i> (Wasserfloh)) (EC50(24h))
Algae toxicity	79 mg/l (<i>Scenedesmus quadricauda</i>) (EC50(3h)) 640 mg/l (<i>Alge Scenedesmus sp.</i>) (EC50(96h))
Fish toxicity	460 mg/l (<i>Pimephales promelas</i>) (LC50(96h)) 645 mg/l (<i>Goldorfe (orfe)</i>) (LC50(96h)) 10 mg/l (<i>Lepomis macrochirus</i>) (LC50 (96h))

Persistence and degradability No further relevant information available.

Behaviour in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxicological effects: Not determined

Remark: Toxic for fish

13 Disposal Considerations

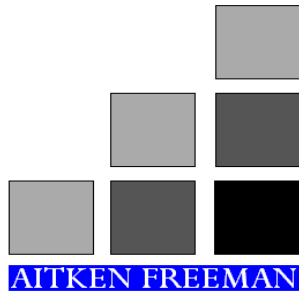
**Product / Packaging
Disposal**

Containers may still present a chemical hazard/ danger when empty.
 Legislation addressing waste disposal requirements may differ by state and/ or territory. Each user must refer to laws operating in their area.
 This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.
DO NOT allow wash water from cleaning or process equipment to enter drains.
 It may be necessary to collect all wash water for treatment before disposal.
 In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
 Where in doubt contact the responsible authority.
 Recycle wherever possible or consult manufacturer for recycling options.
 Consult State Land Waste Authority for disposal.
 Bury or incinerate residue at an approved site.
 Recycle containers if possible, or dispose of in an authorised landfill.

14 Transport Information

Labels Required





Land Transport

UN No. 2735

Proper Shipping Name 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)

Transport Hazard Class Class 8

Packing Group III

Environmental Hazard Not Applicable

Hazchem ·3Z

15 Regulatory Information

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

· *Standard for the Uniform Scheduling of Medicines and Poisons*

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**

GHS05 GHS07 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

3-aminomethyl-3,5,5- trimethylcyclohexylamine

Benzyl alcohol

· **Hazard statements**

Harmful if swallowed.

Harmful if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

· **Precautionary statements**

Do not breathe dusts or mists.

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

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

Immediately call a POISON CENTER/doctor.

Store locked up.

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*

· **Seveso category E1** *Hazardous to the Aquatic Environment*

16 Other Information

Classification of the preparation and its individual components has drawn on official and authoritative sources using available literature references.