

Safety Data Sheet

KERAPOXY ADHESIVE comp. A

Safety Data Sheet dated: 14/03/2023 - version 4

Date of first edition: 18/04/2019



Section 1: Identification

GHS Product identifier

Mixture identification:

Trade name: KERAPOXY ADHESIVE comp. A

Trade code: 9025112

Recommended use of the chemical and restrictions on use

Recommended use: Acid-resistant epoxy grout and adhesive for ceramic tiles

Uses advised against: Data not available.

Supplier's details

Company: MAPEI AUSTRALIA Pty Ltd

180 Viking Drive Wacol QLD 4076 Australia

T. +61 7 32765000 (Mon-Fri 8am to 4.30pm)

F. +61 7 32765076

Responsible: sales@mapei.com.au

Emergency phone number

Australian Poisons Information Centre 24 Hour Service 13 11 26

Police or Fire Brigade 000

Section 2: Hazard(s) identification



Classification of the Hazardous chemical

Skin irritation, Category 2

Causes skin irritation.

Eye irritation, Category 2A

Causes serious eye irritation.

Skin Sensitisation, Category 1A

May cause an allergic skin reaction.

Long-term (chronic) aquatic hazard - Category 3

Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

GHS label elements, including precautionary statements

Pictograms and Signal Words



Warning

Hazard statements

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

H412

Harmful to aquatic life with long lasting effects.

Precautionary statements

P261

Avoid breathing mist/vapours/spray.

P264

Wash hands thoroughly after handling.

P273

Avoid release to the environment.

P280

Wear protective gloves/clothing and eye/face protection.

P302+P352

IF ON SKIN: Wash with plenty of water.

P305+P351+P338

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

P321

Specific treatment (see supplementary instructions on this label)

P333+P313

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

P337+P313

If eye irritation persists: Get medical advice/attention.

P362+P364

Take off contaminated clothing and wash it before reuse.

Other hazards which do not result in a classification

Other Hazards: No other hazards

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

This preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

Section 3: Composition and information on ingredients**Substances**

no data available

Mixtures

Mixture identification: KERAPOXY ADHESIVE comp. A

Hazardous components within the meaning of the "Australian Work Health and Safety (WHS)" regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	free crystalline silica (Ø >10 µ)	CAS:14808-60-7 EC:238-878-4		
≥20 - <25 %	calcium carbonate	CAS:1317-65-3 EC:215-279-6		
≥10 - <20 %	bis-[4-(2,3-epoxipropoxy)phenyl]propane	CAS:1675-54-3, 25085-99-8 EC:216-823-5 Index:603-073-00-2	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2A, H319 Aquatic Chronic 2, H411 Specific Concentration Limits: C ≥ 5%: Skin Irrit. 2 H315 C ≥ 5%: Eye Irrit. 2A H319	01-2119456619-26
≥2.5 - <5 %	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS:9003-36-5 EC:701-263-0	Skin Irrit. 2, H315; Aquatic Chronic 2, H411; Skin Sens. 1, H317	01-2119454392-40-XXXX
≥2.5 - <5 %	benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H332; Acute Tox. 4, H302; Eye Irrit. 2A, H319	01-2119492630-38-XXXX
≥2.5 - <5 %	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS:68609-97-2 EC:271-846-8 Index:603-103-00-4	Skin Irrit. 2, H315; Skin Sens. 1B, H317	01-2119485289-22-XXXX

Section 4: First-aid measures**Description of necessary first-aid measures**

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose of safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

- Remove casualty to fresh air and keep warm and at rest.

Symptoms caused by exposure

Eye irritation
 Eye damages
 Skin Irritation
 Erythema

Medical attention and special treatment

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Section 5: Firefighting measures

Suitable extinguishing media

None in particular.
Water.
Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
Hazardous combustion products: no data available
Explosive properties: ==
Oxidizing properties: no data available

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

HazChem Code/Emergency Action code

N.A.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove persons to safety.

Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Limit leakages with earth or sand.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand
Wash with plenty of water.
Retain contaminated washing water and dispose it.

Section 7: Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Section 8: Exposure controls and personal protection

Control parameters – exposure standards, biological monitoring

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
free crystalline silica (Ø >10 µ) CAS: 14808-60-7	ACGIH		Long Term: 0,025 mg/m ³ A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
	National	AUSTRALIA	Long Term: 0,05 mg/m ³
	National	BELGIUM	Long Term: 0,1 mg/m ³

National BULGARIA	Long Term: 0,07 mg/m3
National CROATIA	Long Term: 0,1 mg/m3
National CZECH REPUBLIC	Long Term: 0,1 mg/m3
National DENMARK	Long Term: 0,3 mg/m3 DENMARK, inhalable aerosol inhalable aerosol
National DENMARK	Long Term: 0,1 mg/m3 DENMARK, respirable aerosol respirable aerosol
National DENMARK	Long Term: 0,3 mg/m3
National DENMARK	Long Term: 0,1 mg/m3
National ESTONIA	Long Term: 0,1 mg/m3
National FINLAND	Long Term: 0,05 mg/m3
National FRANCE	Long Term: 0,1 mg/m3
National HUNGARY	Long Term: 0,15 mg/m3
National LITHUANIA	Long Term: 0,1 mg/m3
National NORWAY	Long Term: 0,3 mg/m3 Totalstøv (total dust); K: Kjemikalier som skal betraktes som kreftfremkallende. (K: Chemicals to be treated as carcinogenic.)
ACGIH	Long Term: 0,025 mg/m3 (R), A2 - Pulm fibrosis, lung cancer
National PORTUGAL	Long Term: 0,025 mg/m3
National ROMANIA	Long Term: 0,1 mg/m3
National SLOVAKIA	Long Term: 0,1 mg/m3; Short Term: 0,5 mg/m3
National SLOVENIA	Long Term: 0,1 mg/m3
National SPAIN	Long Term: 0,05 mg/m3
National SWEDEN	Long Term: 0,1 mg/m3
National SWITZERLAN D	Long Term: 0,15 mg/m3 A
calcium carbonate CAS: 1317-65-3	OSHA Long Term: 15 mg/m3
	OSHA Long Term: 5 mg/m3
National GREECE	Long Term: 10 mg/m3
National GREECE	Long Term: 5 mg/m3
National BELGIUM	Long Term: 10 mg/m3
National CZECH REPUBLIC	Long Term: 10 mg/m3
National HUNGARY	Long Term: 10 mg/m3
National ESTONIA	Long Term: 10 mg/m3
National ESTONIA	Long Term: 5 mg/m3
National SLOVAKIA	Long Term: 10 mg/m3
National UNITED KINGDOM	Long Term: 10 mg/m3; Short Term: 30 mg/m3
National UNITED KINGDOM	Long Term: 10 mg/m3; Short Term: 12 mg/m3
National UNITED KINGDOM	Long Term: 4 mg/m3; Short Term: 30 mg/m3
National BULGARIA	Long Term: 10 mg/m3
National ROMANIA	Long Term: 10 mg/m3
National CROATIA	Long Term: 4 mg/m3
National CROATIA	Long Term: 10 mg/m3
National FRANCE	Long Term: 10 mg/m3
benzyl alcohol CAS: 100-51-6	National FINLAND Long Term: 45 mg/m3 - 10 ppm
	National POLAND Long Term: 240 mg/m3

National GERMANY	Long Term: 22 mg/m ³ - 5 ppm
National CZECH REPUBLIC	Long Term: 40 mg/m ³
National LATVIA	Long Term: 5 mg/m ³
National CZECH REPUBLIC	Ceiling - Short Term: 80 mg/m ³
National BULGARIA	Long Term: 5 mg/m ³
National LITHUANIA	Long Term: 5 mg/m ³
National SLOVENIA	Long Term: 22 mg/m ³ - 5 ppm; Short Term: 44 mg/m ³ - 10 ppm

Predicted No Effect Concentration (PNEC) values

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol
CAS: 9003-36-5

Exposure Route: Fresh Water; PNEC Limit: 0,003 mg/l
 Exposure Route: Freshwater sediments; PNEC Limit: 0,294 mg/kg
 Exposure Route: Marine water; PNEC Limit: 0,0003 mg/l
 Exposure Route: Marine water sediments; PNEC Limit: 0,0294 mg/kg
 Exposure Route: Soil; PNEC Limit: 0,237 mg/kg
 Exposure Route: Fresh Water; PNEC Limit: 1 mg/l

benzyl alcohol
CAS: 100-51-6

Exposure Route: Marine water; PNEC Limit: 0,1 mg/l
 Exposure Route: Freshwater sediments; PNEC Limit: 5,27 mg/kg
 Exposure Route: Marine water sediments; PNEC Limit: 0,527 mg/kg
 Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 39 mg/l
 Exposure Route: Soil; PNEC Limit: 0,45 mg/kg
 Exposure Route: Intermittent release; PNEC Limit: 2,3 mg/l

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
CAS: 68609-97-2

Exposure Route: Fresh Water; PNEC Limit: 0,0072 mg/l
 Exposure Route: Freshwater sediments; PNEC Limit: 66,77 mg/kg
 Exposure Route: Marine water sediments; PNEC Limit: 6,677 mg/kg
 Exposure Route: Soil; PNEC Limit: 80,12 mg/kg
 Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 10 mg/l

Derived No Effect Level (DNEL) values

benzyl alcohol
CAS: 100-51-6

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 20 mg/kg
 Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 4 mg/kg
 Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Industry: 110 mg/m³; Consumer: 27 mg/m³
 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 22 mg/m³; Consumer: 5,4 mg/m³
 Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Industry: 40 mg/kg; Consumer: 20 mg/kg
 Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Industry: 8 mg/kg; Consumer: 4 mg/kg

Appropriate engineering controls

no data available

Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; AS/NZS 2161.10:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to AS/NZS 1715-1716 for information on selection and use of appropriate respiratory protection equipment.

no data available

Section 9: Physical and chemical properties

Physical state: Liquid

Appearance: paste

Color: various

Odour: Characteristic

pH: no data available

Melting point / freezing point: no data available

Initial boiling point and boiling range: no data available

Flash point: no data available

Evaporation rate: no data available

Flammability (Solid, Gas) no data available

Lower and upper explosion limit/flammability limits: no data available

Vapour pressure: no data available

Vapour density: no data available

Relative density: no data available

Solubility in water: Insoluble

Solubility in oil: soluble

Partition coefficient (n-octanol/water): no data available

Auto-ignition temperature: no data available

Decomposition temperature: no data available

Kinematic viscosity: no data available

VOC % (Volatile Organic Compound) : 16.5 (A+B) (Rule 1168) g/l

Particle characteristics:

Particle size: no data available

Particle size distribution: no data available

Shape and aspect ratio: no data available

Specific surface area: no data available

Section 10: Stability and reactivity

Reactivity

Stable under normal conditions

Chemical stability

no data available

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

Section 11: Toxicological information

Information on toxicological effects

Toxicological Information of the Preparation

a) acute toxicity Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation	The product is classified: Skin irritation, Category 2(H315)
c) serious eye damage/irritation	The product is classified: Eye irritation, Category 2A(H319)
d) respiratory or skin sensitisation	The product is classified: Skin Sensitisation, Category 1A(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

free crystalline silica (Ø >10 µ)	a) acute toxicity	LD50 Oral > 2000 mg/kg
		LD50 Skin > 2000 mg/kg
calcium carbonate	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
bis-[4-(2,3-epoxipropoxy)phenyl] propane	a) acute toxicity	LD50 Skin Rabbit = 20 mg/kg
		LD50 Oral Rat = 11300 µL/kg
		LD50 Skin Rabbit = 20000 mg/kg
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	a) acute toxicity	LD50 Oral Rat > 5000, mg/kg
		LD50 Skin Rat > 2000 mg/kg
	i) STOT-repeated exposure	NOAEL Oral = 250 mg/kg
benzyl alcohol	a) acute toxicity	LC50 Inhalation Mist Rat = 11, mg/l 4h LD50 Oral Rat = 1230, mg/kg
	g) reproductive toxicity	NOAEL Rat = 1072, mg/m3
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	a) acute toxicity	LD50 Oral Rat = 19200 mg/kg
		LD50 Skin Rabbit = 4000, mg/kg

Section 12: Ecological information

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Long-term (chronic) aquatic hazard - Category 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
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calcium carbonate	CAS: 1317-65-3 - EINECS: 215-279-6	a) Aquatic acute toxicity : LC50 Fish > 10000 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae > 200 mg/L 72
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS: 9003-36-5 - EINECS: 701-263-0	a) Aquatic acute toxicity : LC50 Fish = 5,7 mg/L 96h
		a) Aquatic acute toxicity : EC50 Daphnia = 2,55 mg/L 48h
		a) Aquatic acute toxicity : EC50 Algae = 1,8 mg/L 72h
benzyl alcohol	CAS: 100-51-6 - EINECS: 202-859-9 - INDEX: 603-057-00-5	a) Aquatic acute toxicity : EC50 Daphnia = 230 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish = 770 mg/L 1
		a) Aquatic acute toxicity : EC50 Algae = 770 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = 460 mg/L 96
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 460 mg/L 96h EPA
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS: 68609-97-2 - EINECS: 271-846-8 - INDEX: 603-103-00-4	a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96h
		a) Aquatic acute toxicity : EL50 Daphnia = 7,2 mg/L 48h
		a) Aquatic acute toxicity : EC50 Algae = 843 mg/L 72h
		b) Aquatic chronic toxicity : NOEC Algae = 500 mg/L 72h

Persistence and degradability

Component	Persitence/Degradability:
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Readily biodegradable

Bioaccumulative potential

Component	Bioaccumulation
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Not bioaccumulative

Mobility in soil

no data available

Other adverse effects

no data available

Section 13: Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

no data available

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

UN number

no data available

UN proper shipping name

no data available

Transport hazard class(es)

no data available

Packing group, if applicable

no data available

Environmental hazards

no data available

Special precautions for user

ADG-Subsidiary hazards no data available

ADG-S.P.: no data available

Road and Rail (ADR-RID):

no data available

Air (IATA):

no data available

Sea (IMDG):

no data available

Additional Information

no data available

HazChem Code/Emergency Action code

no data available

Section 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

This Safety Data Sheet has been prepared according to the Australian Work Health and Safety (WHS) act and the Code of Practice on preparation of safety data sheets for Hazardous Chemicals.

AICIS: all components are listed

Section 16: Any other relevant information

Code	Description
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2A	Eye Irrit. 2A	Eye irritation, Category 2A
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
AUS-HAE/C2	Aquatic Chronic 2	Long-term (chronic) aquatic hazard - Category 2

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE: Acute Toxicity Estimate
ATEmix: Acute toxicity Estimate (Mixtures)
BCF: Biological Concentration Factor
BEI: Biological Exposure Index
BOD: Biochemical Oxygen Demand
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CAV: Poison Center
CE: European Community
CLP: Classification, Labeling, Packaging.
CMR: Carcinogenic, Mutagenic and Reprotoxic
COD: Chemical Oxygen Demand
COV: Volatile Organic Compound
CSA: Chemical Safety Assessment
CSR: Chemical Safety Report
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level.
DPD: Dangerous Preparations Directive
DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 16. OTHER INFORMATION

Safety Data Sheet

KERAPOXY ADHESIVE comp. B

Safety Data Sheet dated: 14/03/2023 - version 4

Date of first edition: 16/09/2020



Section 1: Identification

GHS Product identifier

Mixture identification:

Trade name: KERAPOXY ADHESIVE comp. B

Trade code: 9025114

Recommended use of the chemical and restrictions on use

Recommended use: Hardener for epoxy products

Uses advised against: Data not available.

Supplier's details

Company: MAPEI AUSTRALIA Pty Ltd

180 Viking Drive Wacol QLD 4076 Australia

T. +61 7 32765000 (Mon-Fri 8am to 4.30pm)

F. +61 7 32765076

Responsible: sales@mapei.com.au

Emergency phone number

Australian Poisons Information Centre 24 Hour Service 13 11 26

Police or Fire Brigade 000

Section 2: Hazard(s) identification



Classification of the Hazardous chemical

Skin corrosion, Category 1B

Causes severe skin burns and eye damage.

Serious eye damage, Category 1

Causes serious eye damage.

Skin Sensitisation, Category 1A

May cause an allergic skin reaction.

Short-term (acute) aquatic hazard - Category 2

Toxic to aquatic life

Long-term (chronic) aquatic hazard - Category 2

Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

GHS label elements, including precautionary statements

Pictograms and Signal Words



Danger

Hazard statements

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

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

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

P302+P352 IF ON SKIN: Wash with plenty of water.

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

P304+P340 IF INHALED: Remove person to fresh air and keep 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 CENTER.

P321	Specific treatment (see supplementary instructions on this label)
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with applicable regulations.

Other hazards which do not result in a classification

Other Hazards: No other hazards

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

Section 3: Composition and information on ingredients

Substances

no data available

Mixtures

Mixture identification: KERAPOXY ADHESIVE comp. B

Hazardous components within the meaning of the "Australian Work Health and Safety (WHS)" regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥50 - <75 %	free crystalline silica (Ø >10 µ)	CAS:14808-60-7 EC:238-878-4		
≥20 - <25 %	Fatty acids C18 unsaturated, reaction products with tetraethylenepentamine	CAS:1226892-45-0, 68410-23-1 EC:629-725-6	Skin Corr. 1C, H314; Skin Sens. 1A, H317; Aquatic Chronic 1, H410; Eye Dam. 1, H318; Aquatic Acute 1, H400	01-2119487006-38-XXXX
≥5 - <10 %	3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS:2855-13-2 EC:220-666-8 Index:612-067-00-9	Acute Tox. 4, H302 Eye Dam. 1, H318 Skin Corr. 1B, H314 Skin Sens. 1A, H317	01-2119514687-32-xxxx
Specific Concentration Limits: C ≥ 0,001%: Skin Sens. 1A H317				
≥2.5 - <5 %	2,4,6-tris(dimethylaminomethyl)phenol	CAS:90-72-2 EC:202-013-9 Index:603-069-00-0	Acute Tox. 4, H302; Skin Corr. 1C, H314; Eye Dam. 1, H318	01-2119560597-27-XXXX
≥0.49 - <1 %	N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine	CAS:10563-29-8 EC:234-148-4	Acute Tox. 4, H302; Skin Corr. 1A, H314; Skin Sens. 1B, H317	01-2119970376-29-XXXX

Section 4: First-aid measures

Description of necessary first-aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- Remove contaminated clothing immediately and dispose of safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

- Remove casualty to fresh air and keep warm and at rest.

Symptoms caused by exposure

- Eye irritation
- Eye damages
- Skin Irritation
- Erythema

Medical attention and special treatment

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Section 5: Firefighting measures

Suitable extinguishing media

None in particular.

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: no data available

Explosive properties: ==

Oxidizing properties: no data available

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

HazChem Code/Emergency Action code

2X

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

Retain contaminated washing water and dispose it.

Section 7: Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Section 8: Exposure controls and personal protection

Control parameters – exposure standards, biological monitoring

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
free crystalline silica (Ø >10 µ) CAS: 14808-60-7	ACGIH		Long Term: 0,025 mg/m ³ A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
		National AUSTRALIA	Long Term: 0,05 mg/m ³
		National BELGIUM	Long Term: 0,1 mg/m ³

National BULGARIA	Long Term: 0,07 mg/m ³
National CROATIA	Long Term: 0,1 mg/m ³
National CZECH REPUBLIC	Long Term: 0,1 mg/m ³
National DENMARK	Long Term: 0,3 mg/m ³ DENMARK, inhalable aerosol inhalable aerosol
National DENMARK	Long Term: 0,1 mg/m ³ DENMARK, respirable aerosol respirable aerosol
National DENMARK	Long Term: 0,3 mg/m ³
National DENMARK	Long Term: 0,1 mg/m ³
National ESTONIA	Long Term: 0,1 mg/m ³
National FINLAND	Long Term: 0,05 mg/m ³
National FRANCE	Long Term: 0,1 mg/m ³
National HUNGARY	Long Term: 0,15 mg/m ³
National LITHUANIA	Long Term: 0,1 mg/m ³
National NORWAY	Long Term: 0,3 mg/m ³ Totalstøv (total dust); K: Kjemikalier som skal betraktes som kreftfremkallende. (K: Chemicals to be treated as carcinogenic.)
ACGIH	Long Term: 0,025 mg/m ³ (R), A2 - Pulm fibrosis, lung cancer
National PORTUGAL	Long Term: 0,025 mg/m ³
National ROMANIA	Long Term: 0,1 mg/m ³
National SLOVAKIA	Long Term: 0,1 mg/m ³ ; Short Term: 0,5 mg/m ³
National SLOVENIA	Long Term: 0,1 mg/m ³
National SPAIN	Long Term: 0,05 mg/m ³
National SWEDEN	Long Term: 0,1 mg/m ³
National SWITZERLAN D	Long Term: 0,15 mg/m ³ A

Predicted No Effect Concentration (PNEC) values

3-aminomethyl-3,5,5-trimethylcyclohexylamine
CAS: 2855-13-2 Exposure Route: Fresh Water; PNEC Limit: 0,06 mg/l

Exposure Route: Marine water; PNEC Limit: 0,006 mg/l

Exposure Route: Intermittent release; PNEC Limit: 0,23 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 5,784 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 0,578 mg/kg

Exposure Route: Soil; PNEC Limit: 1,121 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 3,18 mg/l

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine
CAS: 10563-29-8 Exposure Route: Fresh Water; PNEC Limit: 0,0092 mg/l

Exposure Route: Marine water; PNEC Limit: 0,00092 mg/l

Exposure Route: Intermittent release; PNEC Limit: 0,092 mg/l

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 18,1 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 0,0336 mg/kg

Derived No Effect Level (DNEL) values

3-aminomethyl-3,5,5-trimethylcyclohexylamine
CAS: 2855-13-2 Exposure Route: Human Inhalation
Worker Industry: 20,1 mg/m³

2,4,6-tris(dimethylaminomethyl)phenol
CAS: 90-72-2 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 0,31 mg/m³

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine
CAS: 10563-29-8

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 3,7 mg/m³; Consumer: 0,65 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Industry: 3,7 mg/m³; Consumer: 0,65 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Industry: 0,67 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 0,2 mg/kg

Appropriate engineering controls

no data available

Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; AS/NZS 2161.10:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to AS/NZS 1715-1716 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

Section 9: Physical and chemical properties

Physical state: Liquid

Appearance: paste

Color: Beige

Odour: ammonia

pH: 11.00

Melting point / freezing point: no data available

Initial boiling point and boiling range: no data available

Flash point: 100 °C (212 °F)

Evaporation rate: no data available

Flammability (Solid, Gas) no data available

Lower and upper explosion limit/flammability limits: no data available

Vapour pressure: no data available

Vapour density: no data available

Relative density: 1.61 g/cm³

Solubility in water: partly soluble

Solubility in oil: soluble

Partition coefficient (n-octanol/water): no data available

Auto-ignition temperature: no data available

Decomposition temperature: no data available

Kinematic viscosity: no data available

VOC % (Volatile Organic Compound) : 16.5 (A+B) (Rule 1168) g/l

Particle characteristics:

Particle size: no data available

Particle size distribution: no data available

Shape and aspect ratio: no data available

Specific surface area: no data available

Section 10: Stability and reactivity

Reactivity

Stable under normal conditions

Chemical stability

no data available

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

Section 11: Toxicological information**Information on toxicological effects****Toxicological Information of the Preparation**

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin corrosion, Category 1B(H314)
c) serious eye damage/irritation	The product is classified: Serious eye damage, Category 1(H318)
d) respiratory or skin sensitisation	The product is classified: Skin Sensitisation, Category 1A(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

free crystalline silica (Ø >10 µ)	a) acute toxicity	LD50 Oral > 2000 mg/kg LD50 Skin > 2000 mg/kg
Fatty acids C18 unsaturated, reaction products with tetraethylenepentamine	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg
3-aminomethyl-3,5,5-trimethylcyclohexylamine	a) acute toxicity	LC50 Inhalation Dust Rat > 5,01 mg/l 4h LD50 Oral Rat = 1030 mg/kg LD50 Skin Rat > 2000 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol	a) acute toxicity	LD50 Oral Rat = 2169 mg/kg LD50 Skin Rat > 1, ml/kg
N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine	a) acute toxicity	LD50 Oral Rat = 1670 mg/kg

b) skin corrosion/irritation Skin Corrosive Skin Rabbit Positive

d) respiratory or skin sensitisation Skin Sensitization Skin Positive

Section 12: Ecological information

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Toxic to aquatic life

Toxic to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Short-term (acute) aquatic hazard - Category 2(H401), Long-term (chronic) aquatic hazard - Category 2(H411)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS: 2855-13-2 - EINECS: 220-666-8 - INDEX: 612-067-00-9	a) Aquatic acute toxicity : LC50 Fish = 110 mg/L 96 a) Aquatic acute toxicity : EC50 Daphnia = 23 mg/L 48 a) Aquatic acute toxicity : EC50 Daphnia = 388 mg/L 48 a) Aquatic acute toxicity : EC50 Algae > 50 mg/L 72 b) Aquatic chronic toxicity : NOEC Daphnia = 3 mg/L - 21 d a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 14,6 mg/L 48h EPA a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 37 mg/L 72h IUCLID
2,4,6-tris(dimethylaminomethyl)phenol	CAS: 90-72-2 - EINECS: 202-013-9 - INDEX: 603-069-00-0	a) Aquatic acute toxicity : LC50 Fish = 175 mg/L 96h a) Aquatic acute toxicity : EC50 Algae = 46,7 mg/L 72h a) Aquatic acute toxicity : NOEC Algae = 25,1 mg/L 72h
N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine	CAS: 10563-29-8 - EINECS: 234-148-4	a) Aquatic acute toxicity : LC50 Fish = 215 mg/L 96 a) Aquatic acute toxicity : EC50 Daphnia = 9,2 mg/L 48 a) Aquatic acute toxicity : EC50 Algae = 21 mg/L 72 a) Aquatic acute toxicity : LC50 Fish Danio rerio > 100 mg/L 96h ECHA

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Other adverse effects

no data available

Section 13: Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

no data available

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

Section 14: Transport information

UN number

2735

UN proper shipping name

ADG-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (adducted polyamide)

ADR-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (adducted polyamide)

IATA-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (adducted polyamide)

IMDG-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (adducted polyamide)

Transport hazard class(es)

ADG-Class: 8

ADR-Class: 8,III

IATA-Class: 8,III

IMDG-Class: 8,III

Packing group, if applicable

ADG-Packing Group: III

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

Environmental hazards

ADG-Environmental Pollutant: Yes

Marine pollutant: Yes

Special precautions for user

ADG-Subsidiary hazards -

ADG-S.P.: 223 274

Road and Rail (ADR-RID):

ADR-Label: 8

ADR-Hazard identification number: NA

ADR-Special Provisions: 274

ADR-Transport category (Tunnel restriction code): 3 (E)

Air (IATA):

IATA-Passenger Aircraft: 852

IATA-Cargo Aircraft: 856

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisions: A3 A803

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: SG35

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 223 274

IMDG-EMS: F-A, S-B

Additional Information

no data available

HazChem Code/Emergency Action code

no data available

Section 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

This Safety Data Sheet has been prepared according to the Australian Work Health and Safety (WHS) act and the Code of Practice on preparation of safety data sheets for Hazardous Chemicals.

AICIS: all components are listed

Section 16: Any other relevant information

Code	Description
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/1C	Skin Corr. 1C	Skin corrosion, Category 1C
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
AUS-HAE/A1	Aquatic Acute 1	Short-term (acute) aquatic hazard - Category 1
AUS-HAE/C1	Aquatic Chronic 1	Long-term (chronic) aquatic hazard - Category 1

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

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

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

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

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

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 16. OTHER INFORMATION