Safety Data Sheet

KERAPOXY ADHESIVE comp. B

Safety Data Sheet dated: 17/09/2020 - version 2

Date of first edition: 16/09/2020



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

Responsable: sales@mapei.com.au

Emergency phone number

Australian Poisons Information Centre 24 Hour Service 13 11 26

Police or Fire Brigade 000

2. Hazard identification







Classification of the Hazardous chemical

Skin Corr. 1B Causes severe skin burns and eye damage.

Eye Dam. 1 Causes serious eye damage.

Skin Sens. 1B May cause an allergic skin reaction.

Aquatic Acute 2 Toxic to aquatic life.

Aquatic Chronic 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/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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 CENTER or doctor/physician.

Date 5/12/2021 Production Name KERAPOXY ADHESIVE comp. B Page n. 1 of 9

P321 Specific treatment (see supplementary instructions on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash 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)

3. Composition/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:

| Concentration (% w/w) | 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 unsat, reaction products with tetraethylenepentamine | CAS:1226892-45- 0, 68410-23-1 EC:629-725-6 | Skin Corr. 1C, H314; Aquatic Acut 1, H400; Skin Sens. 1, H317; Aquatic Chronic 1, H410 | e 01-2119487006-38-xxxx |
| ≥5 - <10 % | | CAS:2855-13-2 EC:220-666-8 Index:612-067- 00-9 | Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 3, H412 | 01-2119514687-32-xxxx |
| ≥2.5 - <5 % | 2,4,6- tris(dimethylaminomethyl)phenol | CAS:90-72-2 EC:202-013-9 | Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1B, H317 | 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 |
| ≥0.25 - <0.49 % | bis[(dimethylamino)methyl]phenol | CAS:71074-89-0, 90-72-2 EC:275-162-0 | Skin Corr. 1C, H314; Skin Sens. 1B, H317 | |

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 opthalmologist 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).

Date 5/12/2021 Production Name KERAPOXY ADHESIVE comp. B Page n. 2 of 9

5. Fire-fighting measures

Suitable extinguishing media

None in particular.

Water.

Carbon dioxide (CO2).

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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Environmental precautions

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

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

Methods and material for containment and cleaning up

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

Wash with plenty of water.

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

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. Exposure controls/personal protection

Control parameters – exposure standards, biological monitoring

List of components with OEL value

| Component | OEL Type | Country | Ceiling | Long Term mg/m3 | Long Term ppm | Short Term mg/m3 | Short Term ppm | Behaviour | Note |
|--|-------------|---------------|---------|-----------------------|---------------------|------------------------|----------------------|-----------|--------------------------------------|
| free crystalline silica (Ø $>10 \mu$) | Nationa | I DENMARK | | 0.3 | | | | | DENMARK, inhalable aerosol |
| | Nationa | I DENMARK | | 0.100 | | | | | DENMARK, respirable aerosol |
| | Nationa | I SWITZERLAND | | 0.15 | | | | | A |
| | ACGIH | None | | 0.025 | | | | | (R), A2 - Pulm fibrosis, lung cancer |
| | Nationa | I NORWAY | | 0.300 | | | | | К 7 |
| | Nationa | l AUSTRALIA | | 0.050 | | | | | |
| | | | | | | | | | |

Date 5/12/2021 Production Name KERAPOXY ADHESIVE comp. B Page n. 3 of 9

Predicted No Effect Concentration (PNEC) values

| Component | CAS-No. | PNEC Limit | Exposure Ro | oute | Exposure F | requency Remark |
|--|------------|-----------------|---------------------------------|---------|--------------|-----------------------------|
| | 2855-13-2 | 0.06 mg/l | Fresh Water | | | |
| | | 0.006 mg/l | Marine water | | | |
| | | 0.23 mg/l | Intermittent | release | | |
| | | 5.784 mg/kg | Freshwater sediments | | | |
| | | 0.578 mg/kg | Marine water sediments | | | |
| | | 1.121 mg/kg | Soil | | | |
| | | 3.18 mg/l | Microorganisi sewage treat | | | |
| 2,4,6- tris (dimethylaminomethyl) phenol | 90-72-2 | 0.084 mg/l | Fresh Water | | | |
| | | 0.0084 mg/l | Marine water | | | |
| | | 0.2 mg/l | Microorganisi sewage treat | | | |
| N'-(3-aminopropyl)-N,N- dimethylpropane-1,3- diamine | 10563-29-8 | 0.0092 mg/l | Fresh Water | | | |
| | | 0.00092 mg/l | Marine water | | | |
| | | 0.092 mg/l | Intermittent | release | | |
| | | 18.1 mg/l | Microorganism sewage treat | | | |
| | | 0.0336 mg/kg | Freshwater sediments | | | |
| Derived No Effect Level | l. (DNEL) | | | | | |
| Component | CAS-No. | Industr Pr | orker Consu ofess mer nal | Expos | ure Route | Exposure Frequency Remark |
| | 2855-13-2 | 20.1 mg/m3 | | Humar | n Inhalation | |
| 2,4,6- tris (dimethylaminomethyl) phenol | 90-72-2 | 4.9 mg/m3 | | Humar | n Inhalation | Long Term, local effects |
| | | 0.31 mg/m3 | | Humar | n Inhalation | Long Term, systemic effects |
| N'-(3-aminopropyl)-N,N- dimethylpropane-1,3- diamine | 10563-29-8 | 3.7 mg/m3 | 0.65 mg/m3 | Humar | n Inhalation | Long Term, systemic effects |

7.5

3.7

0.67

mg/kg

mg/m3

mg/m3

Appropriate engineering controls

no data available

Date 5/12/2021 Production Name KERAPOXY ADHESIVE comp. B Page n. 4 of 9

0.65

0.2

mg/kg

mg/m3

Human Inhalation

Human Inhalation

Human Dermal

Human Oral

Short Term, systemic

Long Term, systemic

Long Term, systemic

Long Term, local

effects

effects

effects

effects

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:

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

Respiratory protection:

Use adequate protective respiratory equipment.

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.

9. Physical and chemical properties

Color: Beige Appearance: paste Odour: ammonia

Odour threshold: no data available

pH: 11.00

Melting point / freezing point: no data available
Initial boiling point and boiling range: no data available

Flash point: $100\ ^{\circ}\text{C}\ (212\ ^{\circ}\text{F})$ Evaporation rate: no data available

Flammability (Solid, Gas): no data available

Upper/lower flammability or explosive 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

Viscosity: 550,000.00 cPs

Specific heat value: no data available

Saturated vapour concentration: no data available

Release of invisible flammable vapours and gases: no data available

Particle size: no data available

Particle size distribution: no data available Shape and aspect ratio: no data available

Crystallinity: no data available Dustiness: no data available

Specific surface area: no data available

 $\label{lem:degree} \mbox{Degree of aggregation or agglomeration, and dispersibility: no data available}$

Biodurability or biopersistence: no data available Surface coating or chemistry: no data available

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

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

SECTION 11: Toxicological information

Date 5/12/2021 Production Name KERAPOXY ADHESIVE comp. B Page n. 5 of 9

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

free crystalline silica (Ø a) acute toxicity

LD50 Oral > 2000 mg/kg

 $>10 \mu$)

LD50 Skin > 2000 mg/kg

Fatty acids C18 unsat,

reaction products with tetraethylenepentamine a) acute toxicity LD50 Oral > 2000 mg/kg

a) acute toxicity

LC50 Inhalation Dust Rat > 5.01 mg/l 4h

LD50 Oral Rat = 1030 mg/kg LD50 Skin Rat > 2000 mg/kg LD50 Oral Rat = 1030 mg/kg LD50 Skin Rat > 2000 mg/kg

2,4,6tris

a) acute toxicity

LD50 Oral Rat = 2169 mg/kg

(dimethylaminomethyl)

phenol

LD50 Skin Rat = 1280 mg/kg LD50 Oral Rat = 1200 mg/kg

N'-(3-aminopropyl)-N,N- a) acute toxicity dimethylpropane-1,3-

LD50 Oral Rat = 1670 mg/kg

diamine

b) skin corrosion/irritation Skin Corrosive Skin Rabbit Positive d) respiratory or skin

Skin Sensitization Skin Positive

sensitisation

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure

Toxicological kinetics, metabolism and distribution information

- i) STOT-repeated exposure
- j) aspiration hazard

12. Ecological information

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 components with eco-toxicological properties

Date 5/12/2021 **Production Name** KERAPOXY ADHESIVE comp. B Page n. 6 of 9 Component Ident. Numb. Ecotox Infos

CAS: 2855-13-2 -EINECS: 612-067-00-9 - INDEX: 220-666-8 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- CAS: 90-72-2 -

tris(dimethylaminomethyl)phenol INDEX: 202-013-9

a) Aquatic acute toxicity: LC50 Fish = 222 mg/L 24

a) Aquatic acute toxicity: LC50 Fish = 249 mg/L 24
 a) Aquatic acute toxicity: LC50 Fish = 175 mg/L 96
 a) Aquatic acute toxicity: EC50 Daphnia = 718 mg/L 96
 a) Aquatic acute toxicity: EC50 Algae = 84 mg/L 72

b) Aquatic chronic toxicity: NOEC Algae = 6.25 mg/L

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

13. Disposal considerations

Disposal methods

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

Methods of disposal:

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.

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

no data available

Special precautions for user

IATA-Subsidiary hazards: IMDG-Subsidiary hazards:

no data available

Additional Information

no data available

HazChem Code/Emergency Action code

no data available

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.

AICS: all components are listed

16. Other information

| Code | Description |
|------|---|
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H400 | Very toxic to aquatic life. |
| H401 | Toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

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

Date 5/12/2021 Production Name KERAPOXY ADHESIVE comp. B Page n. 8 of 9

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

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

Date 5/12/2021 Production Name KERAPOXY ADHESIVE comp. B Page n. 9 of 9