

## Safety Data Sheet

### KERALASTIC T comp. B

Safety Data Sheet dated: 4/29/2019 - version 1



## Section 1. Identification of the substance and supplier

### Product identifier

Mixture identification:

Trade name: KERALASTIC T comp. B

Trade code: 901041

### Recommended use of the chemical and restrictions on use

Recommended use: Hardener for epoxy-polyurethane based adhesives or sealants

Uses advised against: Data not available

### Supplier's details

Company: MBP (NZ) Ltd. - 88 Carbine Road, Mount Wellington, Auckland 1060, New Zealand Email: enquiries@MBPLtd.co.nz

Website: www.MBPLtd.co.nz - Phone: +64 9 921 1994 (Mon-Fri 9am-5pm) - Fax: +64 9 921 1993

### Emergency phone number

New Zealand Poisons Centre: Ph: 0800 764 766

## Section 2. Hazards identification

### HSNO hazard classification

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2017.

### HSNO classification:

- |                          |   |
|--------------------------|---|
| 6.1E (oral)              | H303 - May be harmful if swallowed.   |
| 8.3A                     | H318 - Causes serious eye damage.   |
| 6.5B                     | H317 - May cause an allergic skin reaction.   |
| 6.9B (Repeated exposure) | H373.G - May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed. |
| 8.2C                     | H314 - Causes severe skin burns and eye damage.   |

### Hazard information

#### Pictograms and Signal Words



Danger

### Hazard statements:

- |      |  |
|------|--|
| H303 | May be harmful if swallowed.   |
| H314 | Causes severe skin burns and eye damage.   |
| H317 | May cause an allergic skin reaction.   |
| H318 | Causes serious eye damage.   |
| H373 | May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed. |

### Precautionary statements:

- |                |  |
|----------------|--|
| P260           | Do not breathe mist/vapours/spray.   |
| P264           | Wash hands thoroughly after handling.  |
| 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. |
| P312           | Call a POISON CENTER or doctor/physician if you feel unwell.   |
| P314           | Get medical advice/attention if you feel unwell.   |
| 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.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.

**Other hazards which do not result in a classification**

No other hazards

**Section 3. Composition/information on ingredients**

**Substances**

N.A.

**Mixtures**

Mixture identification: KERALASTIC T comp. B

**Hazardous components within the meaning of HSNO Act and related classification**

Quantity	Name	Ident. Numb.	Classification
≥10 - <20 %	4,4'-Methylenebis(cyclohexylamine)	CAS:1761-71-3 EC:217-168-8	6.1D (oral), H302; 8.2B, H314; 6.5B, H317; 6.9B (Repeated exposure), H373
≥10 - <20 %	benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	6.1D (inhalation), H332; 6.1D (oral), H302; 6.4A, H319
≥10 - <20 %	Amines, polyethylenepoly-, triethylenetetramine fraction (TETA)	CAS:90640-67-8 EC:292-588-2 Index:612-059-00-5	6.1D (dermal), H312; 6.1D (oral), H302; 8.2B, H314; 8.3A, H318; 6.5B, H317; 9.1C, H412
≥5 - <10 %	2,4,6-tris(dimethylaminomethyl)phenol	CAS:90-72-2 EC:202-013-9	8.2C, H314; 8.3A, H318; 6.5B, H317
≥1 - <2.5 %	bis[(dimethylamino)methyl]phenol	CAS:71074-89-0 EC:275-162-0	8.2C, H314; 6.5B, H317

**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:

- If breathing is irregular or stopped, administer artificial respiration.
- In case of inhalation, consult a doctor immediately and show him packing or label.

**Indication of immediate medical attention and special treatment needed, if necessary**

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

**Most important symptoms/effects, acute and delayed**

- Eye irritation
- Eye damages
- Skin Irritation
- Erythema

**Section 5. Fire-fighting measures**

**Extinguishing media**

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO2).

Unsuitable extinguishing media:

None in particular.

**Specific hazards arising from the chemical**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: 1.0 - 7.0

Oxidizing properties: N.A.

**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.

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**Section 6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

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 materials for containment and cleaning up**

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

Wash with plenty of water.

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**Section 7. Handling and storage**

**Precautions for safe handling**

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

Use localized ventilation system.

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.

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**Section 8. Exposure controls/personal protection**

**Workplace Exposure Standards**

**Predicted No Effect Concentration (PNEC) values**

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
4,4'-Methylenebis (cyclohexylamine)	1761-71-3	0,08 mg/l	Intermittent release		
benzyl alcohol	100-51-6	1 mg/l	Fresh Water		
		0,1 mg/l	Marine water		
		5,27 mg/kg	Freshwater sediments		
		0,527 mg/kg	Marine water sediments		

		39 mg/l	Microorganisms in sewage treatments
		0,45 mg/kg	Soil
		2,3 mg/l	Intermittent release
Amines, polyethylenepoly-, triethylenetetramine fraction (TETA)	90640-67-8	0,19 mg/l	Fresh Water
		0,038 mg/l	Marine water
		95,5 mg/kg	Freshwater sediments
		19,2 mg/kg	Marine water sediments
		19,1 mg/kg	Soil
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	Microorganisms in sewage treatments

#### Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark	
4,4'-Methylenebis (cyclohexylamine)	1761-71-3	0,5 mg/m3			Human Inhalation	Long Term, systemic effects		
benzyl alcohol	100-51-6			20 mg/kg	Human Oral	Short Term, systemic effects		
				4 mg/kg	Human Oral	Long Term, systemic effects		
			110 mg/m3		27 mg/m3	Human Inhalation	Short Term, systemic effects	
			22 mg/m3		5,4 mg/m3	Human Inhalation	Long Term, systemic effects	
			40 mg/kg		20 mg/kg	Human Dermal	Short Term, systemic effects	
			8 mg/kg		4 mg/kg	Human Dermal	Long Term, systemic effects	
Amines, polyethylenepoly-, triethylenetetramine fraction (TETA)	90640-67-8		0,57 mg/kg	0,25 mg/kg	Human Dermal	Long Term, systemic effects		
			0,001 mg/l	0,00029 mg/l	Human Inhalation	Long Term, systemic effects		
				8 mg/kg	Human Dermal	Short Term, systemic effects		
				0,41 mg/kg	Human Oral	Long Term, systemic effects		

		0, 028000	0, 430000 mg/cm2	Human Dermal	Short Term, local effects
2,4,6- tris (dimethylaminometh yl)phenol	90-72-2	4,9 mg/m3		Human Inhalation	Long Term, local effects
		0,31 mg/m3		Human Inhalation	Long Term, systemic effects

### Engineering Controls

N.A.

### 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.

Thermal Hazards:

N.A.

## Section 9. Physical and chemical properties

Physical state: Liquid

Appearance and colour: liquid light brown

Odour: ammonia

Odour threshold: N.A.

pH: 11.00

Melting point / freezing point: N.A.

Initial boiling point and boiling range: >100 °C (>212 °F)

Flash point: >93,1 °C (199,6 °F)

Flammability (Solid, Gas): N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour pressure: 0.20

Vapour density: 3.6

Relative density: 0.92 g/cm3

Solubility in water: partly soluble

Solubility in oil: Soluble

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: 400.00 °C

Decomposition temperature: N.A.

Kinematic viscosity: N.A.

Particle characteristics: No Data Available

Viscosity: 30.00 cPs

## Section 10. Stability and reactivity

### Reactivity

Stable under normal conditions

### Chemical stability

Data not 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

## 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:

4,4'-Methylenebis(cyclohexylamine)	a) acute toxicity	LD50 Oral Rat = 625 mg/kg  LD50 Skin Rabbit = 2110 mg/kg
benzyl alcohol	a) acute toxicity	LD50 Skin Rabbit = 2000 mg/kg LD50 Oral Rat = 1620 mg/kg LC50 Inhalation Rat = 11,00000 mg/l 4h LD50 Skin Rabbit = 2 g/kg LC50 Inhalation Rat = 8,8 mg/l 4h LD50 Oral Rat = 1230 mg/kg
	g) reproductive toxicity	NOAEL Rat = 1072 mg/m3
Amines, polyethylenepoly-, triethylenetetramine fraction (TETA)	a) acute toxicity	LD50 Oral Rat = 1760 mg/kg  LD50 Skin Rabbit = 1465 mg/kg
	b) skin corrosion/irritation	Skin Irritant Positive
2,4,6-tris(dimethylaminomethyl)phenol	a) acute toxicity	LD50 Oral Rat = 2169 mg/kg

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

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## Section 12. Ecological information

### Ecotoxicity

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

Eco-Toxicological Information:

### List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
>=10 - <20 %	4,4'-Methylenebis(cyclohexylamine)	CAS: 1761-71-3 - EINECS: 217-168-8	a) Aquatic acute toxicity : EC50 Daphnia = 6,84 mg/L 48  a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = mg/L 72 b) Aquatic chronic toxicity : NOEC Daphnia = 4 mg/L 504
>=10 - <20 %	benzyl alcohol	CAS: 100-51-6	a) Aquatic acute toxicity : EC50 Daphnia = 230 mg/L 48

EINECS: 202-859-9 - INDEX: 603-057-00-5

- 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 : EC50 Daphnia = 66 mg/L
- b) Aquatic chronic toxicity : NOEC Daphnia = 51 mg/L - 21 d
- a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 460 mg/L 96h EPA
  
- a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 10 mg/L 96h EPA
  
- a) Aquatic acute toxicity : EC50 Daphnia water flea = 23 mg/L 48h

>=10 - <20 % Amines, polyethylenepoly-, triethylenetetramine fraction (TETA)

CAS: 90640-67-8 - EINECS: 292-588-2 - INDEX: 612-059-00-5

- a) Aquatic acute toxicity : LC50 Fish = 330 mg/L 96

>=5 - <10 % 2,4,6-tris(dimethylaminomethyl)phenol

CAS: 90-72-2 - EINECS: 202-013-9

- a) Aquatic acute toxicity : EC50 Daphnia = 31,1 mg/L 48
- a) Aquatic acute toxicity : EC50 Algae = 20 mg/L 72
- 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

**Persistence and degradability**

N.A.

**Bioaccumulative potential**

N.A.

**Mobility in soil**

N.A.

**Other adverse effects**

N.A.

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**Section 13. Disposal considerations**

**Disposal methods**

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

**Special precautions to be taken during disposal**

No Data Available

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**Section 14. Transport information**

**UN number**

2735

**UN proper shipping name**

NZS-Shipping Name: N.A.

ADR-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (isophoronediamine, bis[(dimethylamino)methyl]phenol mixture)

IATA-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (isophoronediamine, bis[(dimethylamino)methyl]phenol mixture)

IMDG-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (isophoronediamine, bis[(dimethylamino)methyl]phenol mixture)

**Transport hazard class(es)**

NZS-Class: -

ADR-Class: 8  
IATA-Class: 8  
IMDG-Class: 8

**Packing group, if applicable**

NZS-Packing Group: III  
ADR-Packing Group: III  
IATA-Packing group: III  
IMDG-Packing group: III

**Environmental hazards**

Marine pollutant: No  
Environmental Pollutant: No

**Special precautions for user**

NZS-Subsidiary risks: -  
NZS-Special Dispositions: -

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-Subrisk: -  
IATA-Erg: 8L  
IATA-Special Provisions: A3 A803

Sea (IMDG):

IMDG-Stowage Code: Category A  
IMDG-Stowage Note: SG35  
IMDG-Subrisk: -  
IMDG-Special Provisions: 223 274  
IMDG-EMS: F-A, S-B

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**Section 15. Regulatory information**

**HSNO Approval**

HSNO approval number and group standard title:  
HSR002542 - Construction Products (Corrosive [8.2C]) Group Standard 2006

**HSNO Controls**

**Certified Handler**  
No Data Available

**New Zealand Inventory of Chemicals (NZIoC)**

All components are listed on the NZIoC Inventory.

**Regulatory references**

Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).  
Hazardous Substances (Classification) Regulations 2001.  
Labelling of Hazardous Substances: Hazard and Precautionary Information (January 2012 EPA0094).  
Assigning a Product to a HSNO Approval (May 2013/Revised June 2014).

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**Section 16. Other information**

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<b>Code</b>	<b>Description</b>
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.



H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure .
H373	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.
H412	Harmful to aquatic life with long lasting effects.

**Description of the HSNO Classification codes used in section 2 or 3:**

<b>Code</b>	<b>Description</b>
6.1D (dermal)	Substances that are acutely toxic - Harmful (dermal).
6.1D (inhalation)	Substances that are acutely toxic - Harmful (inhalation).
6.1D (oral)	Substances that are acutely toxic - Harmful (oral).
6.1E (oral)	Substances that are acutely toxic - May be harmful (oral).
6.4A	Substances that are irritating to the eye.
6.5B	Substances that are contact sensitisers.
6.9B (Repeated exposure)	Substances that are harmful to human target organs or systems (Repeated exposure).
8.2B	Substances that are corrosive to dermal tissue UN PGII.
8.2C	Substances that are corrosive to dermal tissue UN PGIII.
8.3A	Substances that are corrosive to ocular tissue.
9.1C	Substances that are harmful in the aquatic environment.

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:

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

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

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

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

HSNO: Hazardous Substances and New Organisms Act 1996.