

Safety Data Sheet

MAPEWRAP 31 SP part B

Safety Data Sheet dated: 12/03/2021 - version 1



Section 1. Identification of the substance and supplier

Product identifier

Mixture identification:

Trade name: MAPEWRAP 31 SP part B

Trade code: 9073238

Recommended use of the chemical and restrictions on use

Recommended use: Hardener for epoxy products

Uses advised against: N.A.

Supplier's details

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

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 2001

HSNO classification:

- 6.1D (oral) H302 - Harmful if swallowed.
8.2B H314 - Causes severe skin burns and eye damage.
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.
9.1C H412 - Harmful to aquatic life with long lasting effects.

Hazard information

Pictograms and Signal Words



Danger

Hazard statements:

- H302 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.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

- P102 Keep out of reach of children.
P260 Do not breathe mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
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.
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.
P363	Wash contaminated clothing 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: MAPEWRAP 31 SP part B

Hazardous components within the meaning of HSNO Act and related classification

Concentration (% w/w)	Name	Ident. Numb.	Classification
≥25 - <50 %	m-xylylenediamine	CAS:1477-55-0 EC:216-032-5	6.1D (inhalation), H332; 6.1D (oral), H302; 8.2B, H314; 6.5B, H317; 9.1C, H412
≥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 %	formaldehyde, polymer with benzenamine, hydrogenated	CAS:135108-88-2 EC:603-894-6	6.1D (oral), H302; 8.2C, H314; 6.5B, H317; 6.9B (Repeated exposure), H373; 9.1C, H412
≥2.5 - <5 %	2,4,6-tris(dimethylaminomethyl)phenol	CAS:90-72-2 EC:202-013-9	8.2C, H314; 8.3A, H318; 6.5B, H317
≥2.5 - <5 %	triethylenetetramine	CAS:90640-67-8 EC:292-588-2	6.1D (dermal), H312; 6.1D (oral), H302; 8.2B, H314; 6.5B, H317; 9.1C, H412

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:

- Give nothing to eat or drink.

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).

Treatment:

(see paragraph 4.1)

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: N.A.
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.

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.

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 materials for containment and cleaning up

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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Section 8. Exposure controls/personal protection

Workplace Exposure Standards

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour Note
m-xylylenediamine	NZL	NEW ZEALAND	C			0.100		

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
m-xylylenediamine	1477-55-0	0.094 mg/kg	Fresh Water		
		0.0094 mg/l	Marine water		
		0.43 mg/kg	Freshwater sediments		
		0.043 mg/kg	Marine water sediments		
		0.152 mg/l	Intermittent release		
		0.045 mg/kg	Soil		
		10 mg/l	Microorganisms in sewage treatments		
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		
2,4,6-tris (dimethylaminomethyl) phenol	90-72-2	2.3 mg/l	Intermittent release		
		0.084 mg/l	Fresh Water		
		0.0084 mg/l	Marine water		
		0.2 mg/l	Microorganisms in sewage treatments		
		0.123 mg/kg	Marine water sediments		
triethylenetetramine	90640-67-8	2.08 mg/kg	Freshwater sediments		
		8 mg/l	Microorganisms in sewage treatments		

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
m-xylylenediamine	1477-55-0	0.33 mg/kg			Human Dermal	Long Term, systemic effects	
		1.2 mg/m3			Human Inhalation	Long Term, systemic effects	
		0.2 mg/m3			Human Inhalation	Long Term, local 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/m ³	5.4 mg/m ³	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
2,4,6-tris (dimethylaminomethyl) phenol	90-72-2	4.9 mg/m ³		Human Inhalation	Long Term, local effects
		0.31 mg/m ³		Human Inhalation	Long Term, systemic effects
triethylenetetramine	90640-67-8	5.38 mg/l		Human Inhalation	Short Term, local effects
		0.57 mg/kg		Human Dermal	Long Term, systemic effects
			20 mg/kg	Human Oral	Short Term, systemic effects
			8 mg/kg	Human Dermal	Short Term, systemic effects
			1.6 mg/l	Human Inhalation	Short 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:

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 $\geq 480\text{min}$.

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Use adequate protective respiratory equipment.

Thermal Hazards:

N.A.

Section 9. Physical and chemical properties

Physical state: Liquid

Appearance and colour: Liquid transparent

Odour: Characteristic

Odour threshold: N.A.

pH: 11.00

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 200 °C (392 °F)

Flash point: 110 °C (230 °F)

Flammability (Solid, Gas): N.A.

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

Vapour pressure: 0.01

Vapour density: N.A.

Relative density: 1.00 g/cm³

Solubility in water: partly soluble

Solubility in oil: soluble

Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: 320.00 cPs
Kinematic viscosity: N.A.
Particle characteristics: No data available

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:

m-xylylenediamine	a) acute toxicity	LD50 Oral Mouse = 930 mg/kg LD50 Skin Rabbit = 2000 mg/kg LC50 Inhalation Dust Rat = 2.4 mg/l 4h LD50 Skin Rabbit = 2 g/kg LC50 Inhalation Rat = 700 ppm 1h LD50 Oral Rat = 660 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/m ³
formaldehyde, polymer with benzenamine, hydrogenated	a) acute toxicity	LD50 Skin Rabbit > 2000 mg/kg LD50 Oral Rat = 367 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol	a) acute toxicity	LD50 Oral Rat = 2169 mg/kg
triethylenetetramine	a) acute toxicity	LD50 Skin Rabbit = 1465 mg/kg LD50 Oral Rat = 1716 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
- Toxicological kinetics, metabolism and distribution information
- i) STOT-repeated exposure
 - j) aspiration hazard

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

Component	Ident. Numb.	Ecotox Infos
m-xylylenediamine	CAS: 1477-55-0 - EINECS: 216-032-5	a) Aquatic acute toxicity : EC50 Algae = 20 mg/L 72 a) Aquatic acute toxicity : EC50 Daphnia = 15.2 mg/L 48 a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96 a) Aquatic acute toxicity : LC50 Fish = 87.6 mg/L 96 a) Aquatic acute toxicity : LC50 Fish Oryzias latipes = 87.6 mg/L 96h ECHA
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 : 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
formaldehyde, polymer with benzenamine, hydrogenated	CAS: 135108-88-2 - EINECS: 603-894-6	a) Aquatic acute toxicity : LC50 Fish = 460 mg/L 96 a) Aquatic acute toxicity : EC50 Daphnia = 15.4 mg/L 48 a) Aquatic acute toxicity : EC50 Algae = 43.9 mg/L 72 c) Bacteria toxicity : EC50 Bacteria = 187 mg/L 3 a) Aquatic acute toxicity : LC50 Fish = 63 mg/L 96 a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 63 mg/L 96h ECHA
2,4,6-tris(dimethylaminomethyl)phenol	CAS: 90-72-2 - EINECS: 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
triethylenetetramine	CAS: 90640-67-8 - EINECS: 292-588-2	a) Aquatic acute toxicity : EC50 Daphnia = 0.1 mg/L 48

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

Section 13. Disposal considerations

Disposal methods

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

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.

Special precautions to be taken during disposal

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

NZS-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (m-xylylendiamine)

ADR-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (m-xylylendiamine)

IATA-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (m-xylylendiamine)

IMDG-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (m-xylylendiamine)

Transport hazard class(es)

NZS-Class: 8

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: 223 274

Road and Rail (ADR-RID) :

ADR-Label: 8

ADR-Hazard identification number: 80

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 Provisioning: A3 A803

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: SG35

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 223 274

IMDG-EMS: F-A, S-B

Section 15. Regulatory information

HSNO Approval

HSNO approval number and group standard title:

HSR002658 - Surface Coatings and Colourants (Corrosive) Group Standard 2006

HSNO Controls

Approved 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).

Section 16. Other information

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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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.
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:

Code	Description
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).
6.4A	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.