

## Safety Data Sheet

### MAPEFLOOR BINDER 930

Safety Data Sheet dated: 20/02/2020 - version 1

## Section 1. Identification of the substance and supplier

### Product identifier

Mixture identification:

Trade name: MAPEFLOOR BINDER 930

Trade code: 9025881

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

Recommended use: Terminated NCO polymer

Uses advised against: N.A.

### 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:

- 6.1D (inhalation) H332 - Harmful if inhaled.  
6.5A H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
6.5B H317 - May cause an allergic skin reaction.  
6.9B (Single exposure) H371.G - May cause damage to organs if inhaled, in contact with skin and if swallowed.  
9.1D H402 - Harmful to aquatic life.  
9.1C H412 - Harmful to aquatic life with long lasting effects.

### Hazard information

#### Pictograms and Signal Words



Danger

### Hazard statements:

- H317 May cause an allergic skin reaction.  
H332 Harmful if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H371 May cause damage to organs if inhaled, in contact with skin and if swallowed.  
H402 Harmful to aquatic life.  
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.  
P271 Use only outdoors or in a well-ventilated area.  
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.  
P285 In case of inadequate ventilation wear respiratory protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P309+P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician 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.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
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: MAPEFLOOR BINDER 930

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

Quantity	Name	Ident. Numb.	Classification
≥75 - <100 %	hexamethylene diisocyanate, oligomers	CAS:28182-81-2 EC:931-274-8	6.1D (inhalation), H332; 6.5B, H317; 6.1E (respiratory tract irritant), H335
≥1 - <2.5 %	bis(neodecanoyloxy) dioctylstannane	CAS:68299-15-0 EC:269-595-4	6.9B (Single exposure), H371
≥0.49 - <1 %	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS:1065336-91-5 EC:915-687-0	6.5B, H317; 9.1A, H400; 9.1A, H410
≥0.1 - <0.25 %	hexamethylene-di-isocyanate	CAS:822-06-0 EC:212-485-8 Index:615-011-00-1	6.1A (inhalation), H330; 6.5A, H334; 6.3A, H315; 6.4A, H319; 6.5B, H317; 6.1E (respiratory tract irritant), H335

**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.

In case of eyes contact:

- Wash immediately with water.

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**

N.A.

**Section 5. Fire-fighting measures**

**Extinguishing media**

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO<sub>2</sub>).

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.

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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.  
Do not use on extensive surface areas in premises where there are occupants.  
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

#### 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
hexamethylene-di-isocyanate	NZL	NEW ZEALAND		0,02		0,07		

#### Biological Exposure Index

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
822-06-0	hexamethylene-di-isocyanate	15	MICROGGCREAT	Urine	1,6-Hexamethylenediamine with hydrolysis	End of turn

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

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
hexamethylene diisocyanate, oligomers	28182-81-2	0,127 mg/l	Fresh Water		

		0,0127	Marine water	mg/l
		1,27	Intermittent	mg/l release
		266700	Freshwater	mg/kg sediments
		53200	Soil	mg/kg
		38,28	Microorganisms	mg/l in sewage treatments
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	1065336-91-5	0,0022	Fresh Water	mg/l
		0,00022	Marine water	mg/l
		0,009	Intermittent	mg/l release
		1,05	Freshwater	mg/kg sediments
		0,11	Marine water	mg/kg sediments
		0,21	Soil	mg/kg
		1	Microorganisms	mg/l in sewage treatments
hexamethylene-di-isocyanate	822-06-0	0,0774	Fresh Water	mg/l
		0,00774	Marine water	mg/l
		0,01334	Freshwater	mg/kg sediments
		0,001334	Marine water	mg/kg sediments
		0,774	Intermittent	mg/l release
		0,0026	Soil	mg/kg
		8,42	Microorganisms	mg/l in sewage treatments

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

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
hexamethylene diisocyanate, oligomers	28182-81-2	1			Human Inhalation	Short Term, local effects	
		0,5			Human Inhalation	Long Term, local effects	
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-	1065336-91-5	2,5		1,25	Human Dermal	Short Term, systemic effects	

piperidyl) sebacate  
and Methyl 1,2,2,6,  
6-pentamethyl-4-  
piperidyl sebacate

2,35 mg/m3	0,58 mg/m3	Human Inhalation	Short Term, systemic effects
2,35 mg/m3	0,58 mg/m3	Human Inhalation	Long Term, systemic effects
2,5 mg/kg	1,25 mg/kg	Human Dermal	Long Term, systemic effects
	1,25 mg/kg	Human Oral	Short Term, systemic effects
	1,25 mg/kg	Human Oral	Long Term, systemic effects

hexamethylene-di- isocyanate	822-06-0	0,07 mg/m3	Human Inhalation	Short Term, systemic effects
		0,07 mg/m3	Human Inhalation	Short Term, local effects
		0,035 mg/m3	Human Inhalation	Long Term, systemic effects
		0,035 mg/m3	Human Inhalation	Long Term, local 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 respiratory protection where ventilation is insufficient or exposure is prolonged.

Use adequate protective respiratory equipment.

Thermal Hazards:

N.A.

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## Section 9. Physical and chemical properties

Physical state: Liquid

Appearance and colour: Liquid transparent

Odour: slight

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: N.A.

Flammability (Solid, Gas): ==

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

Vapour pressure: N.A.

Vapour density: N.A.

Relative density: 1.15 g/cm3

Solubility in water: insoluble, reagisce

Solubility in oil: partly soluble

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

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Kinematic viscosity: N.A.

Particle characteristics: No Data Available

Viscosity: 590.00 cPs

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## 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

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## 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:

hexamethylene diisocyanate, oligomers	a) acute toxicity	LD50 Oral Rat > 2500 mg/kg LD50 Skin Rat > 2000 mg/kg LD50 Skin Rabbit > 2000 mg/kg LC50 Inhalation Rat = 0,39 mg/l 4h LC50 Inhalation Rat = 18500 mg/m <sup>3</sup> 1h
	h) STOT-single exposure	NOAEL Inhalation Vapour Rat = 3 mg/m <sup>3</sup>
	i) STOT-repeated exposure	NOAEL Inhalation Vapour Rat = 3,3 mg/l
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	a) acute toxicity	LD50 Oral Rat = 3230 mg/kg
hexamethylene-di-isocyanate	a) acute toxicity	LD50 Oral Rat = 959 mg/kg LD50 Skin Rat > 7000 mg/kg LC50 Inhalation Rat = 0,124 mg/l 4h LD50 Skin Rabbit = 593 mg/kg LC50 Inhalation Rat = 0,06 mg/l 4h LD50 Oral Rat = 738 mg/kg LD50 Oral Rat = 738 mg/kg
	f) carcinogenicity	NOAEC Inhalation Rat = 0,164 ppm
	i) STOT-repeated exposure	NOAEC Inhalation Rat = 0,005 ppm

**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
- k) 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
hexamethylene diisocyanate, oligomers	CAS: 28182-81-2 - EINECS: 931-274-8	a) Aquatic acute toxicity : LC50 Fish = 8,9 mg/L  a) Aquatic acute toxicity : EC50 Daphnia = 127 mg/L 48 a) Aquatic acute toxicity : EC50 Algae > 1000 mg/L 72
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS: 1065336-91-5 - EINECS: 915-687-0	a) Aquatic acute toxicity : EC50 Daphnia = 20 mg/L 24  a) Aquatic acute toxicity : EC50 Algae = 0,22 mg/L 72 a) Aquatic acute toxicity : LC50 Fish = 0,97 mg/L 96 a) Aquatic acute toxicity : LC50 Fish = 7,9 mg/L 96 a) Aquatic acute toxicity : LC50 Fish = 0,9 mg/L 96 b) Aquatic chronic toxicity : NOEC Daphnia = 6,3 mg/L - 21 d
hexamethylene-di-isocyanate	CAS: 822-06-0 - EINECS: 212-485-8 - INDEX: 615-011-00-1	a) Aquatic acute toxicity : LC50 Fish = 22 mg/L 96  c) Bacteria toxicity : EC50 = 842 mg/L 3 a) Aquatic acute toxicity : EC50 Algae > 77,4 mg/L b) Aquatic chronic toxicity : NOEC Algae = 11,7 mg/L 72 a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio = 26,1 mg/L 96h IUCLID

### 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

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

## Section 14. Transport information

Not classified as dangerous in the meaning of transport regulations.

**UN number**

N.A.

**UN proper shipping name**

N.A.

**Transport hazard class(es)**

N.A.

**Packing group, if applicable**

N.A.

**Environmental hazards**

N.A.

**Special precautions for user**

NZS-Subsidiary risks: N.A.

NZS-Special Dispositions: N.A.

## Road and Rail (ADR-RID):

N.A.

## Air (IATA):

N.A.

## Sea (IMDG):

N.A.

**Section 15. Regulatory information****HSNO Approval**

HSNO approval number and group standard title:

HSR002670 - Surface Coatings and Colourants (Subsidiary Hazard) 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
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H371	May cause damage to organs if swallowed.
H371	May cause damage to organs if inhaled, in contact with skin and if swallowed.
H400	Very toxic to aquatic life.
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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

Code	Description
6.1A (inhalation)	Substances that are acutely toxic - Fatal (inhalation).
6.1D (inhalation)	Substances that are acutely toxic - Harmful (inhalation).
6.1E (respiratory tract irritant)	Respiratory tract irritant.



6.3A	Substances that are irritating to the skin.
6.4A	Substances that are irritating to the eye.
6.5A	Substances that are respiratory sensitisers.
6.5B	Substances that are contact sensitisers.
6.9B (Single exposure)	Substances that are harmful to human target organs or systems (Single exposure).
9.1A	Substances that are very ecotoxic in the aquatic environment.
9.1C	Substances that are harmful in the aquatic environment.
9.1D	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action.

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.