

## Safety Data Sheet

### MAPEFLEX PU 40 GRIGIO

Safety Data Sheet dated: 18/03/2021 - version 1



## Section 1. Identification of the substance and supplier

### Product identifier

Mixture identification:

Trade name: MAPEFLEX PU 40 GRIGIO

Trade code: 901952

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

Recommended use: Polyurethane-based adhesive

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:

- 6.3B H316 - Causes mild skin irritation.  
6.5A H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
6.5B H317 - May cause an allergic skin reaction.  
6.7B H351.G - Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

### Hazard information

#### Pictograms and Signal Words



Danger

### Hazard statements:

- H316 Causes mild skin irritation.  
H317 May cause an allergic skin reaction.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H351 Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

### Precautionary statements:

- P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P261 Avoid breathing mist/vapours/spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P281 Use personal protective equipment as required.  
P285 In case of inadequate ventilation wear respiratory protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
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

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## Section 3. Composition/information on ingredients

### Substances

N.A.

### Mixtures

Mixture identification: MAPEFLEX PU 40 GRIGIO

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

Concentration (% w/w)	Name	Ident. Numb.	Classification
≥0.49 - <1 %	4-isocyanatesulphonyltoluene; tosyl isocyanate	CAS:4083-64-1 EC:223-810-8 Index:615-012-00-7	6.4A, H319; 6.1E (respiratory tract irritant), H335; 6.3A, H315; 6.5A, H334
≥0.1 - <0.25 %	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	CAS:101-68-8 EC:202-966-0 Index:615-005-00-9	6.1D (inhalation), H332; 6.4A, H319; 6.1E (respiratory tract irritant), H335; 6.3A, H315; 6.5A, H334; 6.5B, H317; 6.9B (Repeated exposure), H373; 6.7B, H351
≥0.1 - <0.25 %	diphenylmethanediisocyanate isomers and homologues	CAS:9016-87-9 EC:618-498-9 Index:615-005-00-9	6.1D (inhalation), H332; 6.4A, H319; 6.1E (respiratory tract irritant), H335; 6.3A, H315; 6.5A, H334; 6.5B, H317; 6.9B (Repeated exposure), H373; 6.7B, H351

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## 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:

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

### 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

N.A.

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## 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.

## 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 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.

Exercise the greatest care when handling or opening the container.

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/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour Note
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	NZL	NEW ZEALAND		0.020		0.070		

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

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	101-68-8	1 mg/l	Fresh Water		
		0.1 mg/l	Marine water		
		1 mg/kg	Soil		
		1 mg/l	Microorganisms in sewage treatments		
		10.000000 mg/l	Intermittent release		

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

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	101-68-8	50 mg/kg			Human Dermal	Short Term, systemic effects	

0.1 mg/m <sup>3</sup>	Human Inhalation	Short Term, systemic effects
0.1 mg/m <sup>3</sup>	Human Inhalation	Short Term, local effects
0.05 mg/m <sup>3</sup>	Human Inhalation	Long Term, systemic effects
0.05 mg/m <sup>3</sup>	Human Inhalation	Long Term, local effects
25 mg/kg	Human Dermal	Short Term, systemic effects
0.05 mg/m <sup>3</sup>	Human Inhalation	Short Term, systemic effects
20 mg/kg	Human Oral	Short Term, systemic effects
0.05 mg/m <sup>3</sup>	Human Inhalation	Short Term, local effects
0.025 mg/m <sup>3</sup>	Human Inhalation	Long Term, systemic effects
0.025 mg/m <sup>3</sup>	Human Inhalation	Long Term, local effects
28.7 mg/cm <sup>2</sup>	17.2 mg/cm <sup>2</sup> Human Dermal	Short 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:

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.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387).

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Thermal Hazards:

N.A.

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## Section 9. Physical and chemical properties

Physical state: Liquid

Appearance and colour: paste Grey

Odour: Characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: 100 °C (212 °F)

Flammability (Solid, Gas): N.A.

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

Vapour pressure: N.A.

Vapour density: N.A.

Relative density: 1.33 g/cm<sup>3</sup>

Solubility in water: Insoluble  
Solubility in oil: partly soluble  
Partition coefficient (n-octanol/water): N.A.  
Auto-ignition temperature: N.A.  
Decomposition temperature: N.A.  
Viscosity: 1,225,000.00 cPs  
Kinematic viscosity: N.A.  
Particle characteristics: No data available

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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:

4-isocyanatesulphonyltoluene; tosyl isocyanate	a) acute toxicity	LC50 Inhalation Rat > 640 ppm 1h	
		LD50 Oral Rat = 2234 mg/kg	
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg	
		LD50 Skin Rabbit > 9400 mg/kg	
		LC50 Inhalation Dust Rat = 0.368 mg/l 4h	
		LC50 Inhalation Rat = 369 mg/m3 4h	
		LD50 Oral Rat = 31600 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Skin Rabbit Positive	
d) respiratory or skin sensitisation	Skin Sensitization Skin Mouse Positive		
	Respiratory Sensitization Inhalation Positive		
	f) carcinogenicity	Carcinogenicity Inhalation Rat = 6 mg/m3	2 y
g) reproductive toxicity	NOAEL Inhalation Rat = 12 mg/m3	20 d	
diphenylmethanediisocyanate isomers and homologues	a) acute toxicity	LD50 Oral Rat > 10000 mg/kg	
		LD50 Skin Rabbit > 9400 mg/kg	
		LC50 Inhalation Dust Rat = 0.31 mg/l 4h	
		LD50 Skin Rabbit > 9.4 g/kg	
		LC50 Inhalation Rat = 490 mg/m3 4h	
		LD50 Oral Rat = 49 g/kg	
g) reproductive toxicity	NOAEL Inhalation Rat = 12 mg/m3		

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

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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

Component	Ident. Numb.	Ecotox Infos
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	CAS: 101-68-8 - EINECS: 202-966-0 - INDEX: 615-005-00-9	a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96  a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24 b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72 c) Bacteria toxicity : EC50 > 100 mg/L 3 d) Terrestrial toxicity : NOEC > 1000 mg/kg - 14 d e) Plant toxicity : NOEC > 1000 mg/kg - 14 d
diphenylmethanediisocyanate isomers and homologues	CAS: 9016-87-9 - EINECS: 618-498-9 - INDEX: 615-005-00-9	a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96  a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24 b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72 c) Bacteria toxicity : EC50 > 100 mg/L 3 d) Terrestrial toxicity : NOEC > 1000 mg/kg - 14 d e) Plant toxicity : NOEC > 1000 mg/kg - 14 d

### 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

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.

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## 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.

No

### Special precautions for user

NZS-Subsidiary risks: N.A.

NZS-Special Dispositions: N.A.

Road and Rail ( ADR-RID ) :

N.A.

ADR-Hazard identification number: NA

Air ( IATA ) :

N.A.

Sea ( IMDG ) :

N.A.

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## Section 15. Regulatory information

### HSNO Approval

HSNO approval number and group standard title:

HSR002679 - Surface Coatings and Colourants (Toxic [6.7]) 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).

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## Section 16. Other information

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Code	Description
H315	Causes skin irritation.
H316	Causes mild skin irritation.

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.

**Description of the HSN0 Classification codes used in section 2 or 3:**

<b>Code</b>	<b>Description</b>
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.
6.3B	Substances that are mildly 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.
6.7B	Substances that are suspected human carcinogens.
6.9B (Repeated exposure)	Substances that are harmful to human target organs or systems (Repeated exposure).

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.