

Safety Data Sheet

MAPEFLOOR PU 400 FC PART B

Safety Data Sheet dated: 09/13/2021 - version 8

Date of first edition: 06/29/2015



1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: MAPEFLOOR PU 400 FC PART B

Trade code: 906QM9999

Recommended use of the chemical and restrictions on use

Recommended use: Hardener for polyurethane-based adhesives

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Phone: 954-246-8888

Responsible: RDProductSafety@mapei.com

Emergency 24 hour numbers:

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887

Emergency Transport CANUTEC (Canada) 1-613-996-6666

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

Acute Tox. 2	Fatal if inhaled.
Eye Dam. 1	Causes serious eye damage.
Resp. Sens. 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	May cause an allergic skin reaction.
STOT SE 3	May cause respiratory irritation.

Label elements

Hazard pictograms and Signal Word



Danger

Hazard statements

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

Precautionary statements

P260	Do not breathe mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P341	IF INHALED: If breathing is difficult, 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.
P320	Specific treatment is urgent (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.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Qty	Name	Ident. Numb.	Classification	Registration Number
75-100 %	polypropylene glycol, isophorone diisocyanate polymer; poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane	CAS:39323-37-0	Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	
5-10 %	propylene carbonate; 1,3-Dioxolan-2-one, 4-methyl-	CAS:108-32-7 EC:203-572-1 Index:607-194-00-1	Eye Irrit. 2A, H319	
5-10 %	isophorone diisocyanate (ipdi); 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	CAS:4098-71-9	Resp. Sens. 1, H334; STOT SE 3, H335; Acute Tox. 1, H330; Skin Sens. 1, H317; Skin Irrit. 2, H315; Aquatic Chronic 3, H412; Eye Dam. 1, H318	

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- Obtain medical attention if skin related symptoms persist.
- Remove contaminated clothing immediately and dispose of safely.

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.

Most important symptoms/effects, acute and delayed

Eye irritation
Eye damages

Indication of any immediate medical attention and special treatment needed

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)

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.

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.

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 material for containment and cleaning up

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

Retain contaminated washing water and dispose it.

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

Storage temperature: N.A.

Always keep in a well ventilated place.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour	Notes
propylene carbonate; 1,3-Dioxolan-2-one, 4-methyl-	MAK	GERMANY		8.5	2				
isophorone diisocyanate (ipdi); 3-	ACGIH				0.005				respiratory

isocyanatomethyl-3,5,5-
trimethylcyclohexyl
isocyanate

MAK	GERMANY	0.046	0.005		
ACGIH			0.005		
MAK	AUSTRIA	0.046	0.005	0.092	0.01

respiratory

Appropriate engineering controls: N.A.

Individual protection measures

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; 29 CFR 1910.138 - ANSI/ISEA 105:

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 $\geq 480\text{min}$.

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

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: colourless

Odour: pungent

Odour threshold: No data available

pH: No data available

Melting point / freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: 100 °C (212 °F)

Evaporation rate: No data available

Upper/lower flammability or explosive limits: No data available

Vapour density: No data available

Vapour pressure: No data available

Relative density: 1.05 g/cm³

Solubility in water: insoluble

Solubility in oil: No data available

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

Solid/gas flammability: No data available

Other information

Substance Groups relevant properties No data available

Miscibility: No data available

Fat Solubility: No data available

Conductivity: No data available

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

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological Information of the Preparation

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:

polypropylene glycol, isophorone diisocyanate polymer; poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane	a) acute toxicity	LD50 Oral Rat > 2.00000 mg/kg	GUIDELINE 423
		LC50 Inhalation Rat = 4.10000 mg/l	Guideline 403
propylene carbonate; 1,3-Dioxolan-2-one, 4-methyl-	a) acute toxicity	LD50 Skin Rabbit > 20 ml/kg	
		LD50 Oral Rat = 29000 mg/kg	
		LD50 Skin Rabbit > 3000 mg/kg	
isophorone diisocyanate (ipdi); 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	a) acute toxicity	LD50 Oral Rat = 4814.00000 mg/kg	
		LC50 Inhalation Rat = 0.03100 mg/l 4h	
		LD50 Skin Rabbit > 7000.00000 mg/kg	
		LD50 Skin Rabbit 1060 mg/kg	
		LC50 Inhalation Rat = 0.135 mg/l 4h	
		LD50 Oral Rat = 1097 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

Substance(s) listed on the IARC Monographs:

None

Substance(s) listed as OSHA Carcinogen(s):

None

Substance(s) listed as NIOSH Carcinogen(s):

None

Substance(s) listed on the NTP report on Carcinogens:

None

12. ECOLOGICAL INFORMATION

Toxicity

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

Eco-Toxicological Information:

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
propylene carbonate; 1,3-Dioxolan-2-one, 4-methyl-	CAS: 108-32-7 - EINECS: 203-572-1 - INDEX: 607-194-00-1	a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 1000 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 500 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus > 500 mg/L 72h IUCLID
isophorone diisocyanate (ipdi); 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	CAS: 4098-71-9	a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 118.70000 mg/L 72h IUCLID a) Aquatic acute toxicity : LC50 Fish leuciscus idus = 1.80000 mg/L 48h a) Aquatic acute toxicity : EC50 Daphnia magna 55.30000 mg/L 24hrs a) Aquatic acute toxicity : EC10 Pseudomonas Putida 554.00000 mg/L 6hrs

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment 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

ADR-UN number: 2290
DOT-UN Number: UN2290
IATA-Un number: 2290
IMDG-Un number: 2290

UN proper shipping name

ADR-Shipping Name: ISOPHORONE DIISOCYANATE
DOT-Proper Shipping Name: Isophorone diisocyanate Mixture
IATA-Technical name: ISOPHORONE DIISOCYANATE MIXTURE
IMDG-Technical name: ISOPHORONE DIISOCYANATE MIXTURE

Transport hazard class(es)

ADR-Class: 6.1
DOT-Hazard Class: 6.1
IATA-Class: 6.1
IMDG-Class: 6.1

Packing group

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

Environmental hazards

Marine pollutant: No
Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): IB3, T4, TP2
DOT-Label(s): 6.1
DOT-Symbol: N/A
DOT-Cargo Aircraft: N/A
DOT-Passenger Aircraft: N/A
DOT-Bulk: N/A
DOT-Non-Bulk: N/A

Road and Rail (ADR-RID) :

ADR-Label: 6.1
ADR-Hazard identification number: 60
ADR-Transport category (Tunnel restriction code): 2 (E)

Air (IATA) :

IATA-Passenger Aircraft: 655
IATA-Cargo Aircraft: 663
IATA-Label: 6.1
IATA-Subsidiary hazards: -

IATA-Erg: 6L
IATA-Special Provisioning: -

Sea (IMDG) :

IMDG-Stowage Code: Category B SW2
IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: -

IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: F-A, S-A
IMDG-MFAG: N/A

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

polypropylene glycol, isophorone diisocyanate polymer; poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane

propylene carbonate; 1,3-Dioxolan-2-one, 4-methyl-

isophorone diisocyanate (ipdi); 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

isophorone diisocyanate (ipdi); 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

Section 304 - Hazardous substances:

No substances listed

Section 313 - Toxic chemical list:

isophorone diisocyanate (ipdi); 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

No substances listed

CAA - Clean Air Act

CAA listed substances:

propylene carbonate; 1,3-Dioxolan-2-one, 4-methyl-

CWA - Clean Water Act

CWA listed substances:

No substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

No substances listed

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

isophorone diisocyanate (ipdi); 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

isophorone diisocyanate (ipdi); 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

isophorone diisocyanate (ipdi); 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

Canada - Federal regulations

DSL - Domestic Substances List

DSL (Domestic Substances List)

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

NDSL (Non Domestic Substances List)

No substances listed

NPRI - National Pollutant Release Inventory

NPRI (National Pollutant Release Inventory) - List of substances listed.

16. OTHER INFORMATION

Safety Data Sheet dated: 9/13/2021 - version 8

Additional classification information

NFPA Health: 3 = Serious

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 1 = Slight

NFPA Special Risk: N.A.



Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

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.

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
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.
H412	Harmful to aquatic life with long lasting effects.

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.

Paragraphs modified from the previous revision:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION