

Safety Data Sheet

MAPEFLEX PU 45 FT

Safety Data Sheet dated: 06/12/2024 - version 1



1. Identification

GHS Product Identifier

Mixture identification:

Trade name: MAPEFLEX PU 45 FT

Trade code: 906PG9990

Recommended use of the chemical and restrictions on use

Recommended use: Polyurethane-based adhesive

Uses advised against: Data not available.

Supplier's details

Company: PT Mapei Indonesia Construction Products

Jl. Meranti Blok L1 no. 6, Delta Silicon 1 Industrial Estate, Lippo Cikarang – Bekasi 17550

Phone +62 21 8990 6029 / +62 21 8991 1427 - Fax +62 21 8990 6052

Responsible: mapei@mapei.co.id

Emergency phone number

T. +62 21 89906029

2. Hazard identification

Classification of the substance or mixture

Respiratory Sensitisation, Category 1A

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sensitisation, Category 1A

May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

GHS label elements

Signal word:

Danger

Hazard statements

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements

P261 Avoid breathing dust.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves/clothing and eye/face protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container in accordance with applicable regulations.

Hazard pictograms:



Other hazards which do not result in a classification

No other hazards

3. Composition/information on ingredients

Substances

N.A.

Mixtures

Mixture identification: MAPEFLEX PU 45 FT

Hazardous components within the meaning of Indonesian GHS and related classification

Qty	Name	Ident. Numb.	Classification
≥1 - <2.5 %	N,N-dibenzyliden polyoxypropylene diamine	CAS:136855-71-5 EC:679-523-7	Skin Irrit. 2, H315
≥0.49 - <1 %	4-isocyanatesulphonyltoluene; tosyl isocyanate	CAS:4083-64-1 EC:223-810-8 Index:615-012-00-7	Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1A, H334
≥0.49 - <1 %	diphenylmethanediisocyanate isomers and homologues	CAS:9016-87-9 EC:618-498-9	Acute Tox. 4, H332; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1A, H334; Skin Sens. 1A, H317; STOT RE 2, H373; Carc. 2, H351

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.

Most important symptoms/effects, acute and delayed

N.A.

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)

5. Fire-fighting measures

Suitable extinguishing media:

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

- None in particular.

Special 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.
- 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 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.
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.

8. Exposure controls/personal protection

Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Occupational Exposure Limit
diphenylmethanediisocyanate isomers and homologues CAS: 9016-87-9	ACGIH	Long Term: 0,05 ppm

Appropriate engineering controls

N.A.

Individual protection measures, such as personal protective equipment (PPE)

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 adequate protective respiratory equipment.

Hands protection:

Suitable materials for safety gloves; EN ISO 374:

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 $\geq 480\text{min}$.

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Skin and body protection:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Hygiene measures

N.A.

9. Physical and chemical properties

Physical state: Liquid

Appearance and colour: paste various

Odour: Characteristic

Odour threshold: N.A.

pH: Not Relevant

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: N.A.

Evaporation rate: N.A.

Flammability (Solid, Gas) N.A.

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

Vapour pressure: N.A.

Vapour density: N.A.

Relative density: 1.35 g/cm³

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: 1,300,000.00 cPs

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

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	The product is classified: Respiratory Sensitisation, Category 1A(H334), Skin Sensitisation, Category 1A(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

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
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

12. Ecological information

Ecotoxicity

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

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

Based on available data, the classification criteria are not met

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
diphenylmethanediisocyanate isomers and homologues	CAS: 9016-87-9 - EINECS: 618-498-9	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.

13. Disposal considerations

Disposal 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

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

N.A.

Road and Rail (ADR-RID):

N.A.

ADR-Hazard identification number: NA

Air (IATA):

N.A.

Sea (IMDG):

N.A.

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

This SDS and the classification of the product have been created in accordance with regulation "23/M-IND/PER/4/2013" and guidance "04/BMI/PER/1/2014".

16. Other information

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Key/legend to the abbreviations and acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists

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

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

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

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

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

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

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

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

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

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Key literature references and sources:

None