Safety Data Sheet
MAPEFLOOR FINISH 450 / B
Safety Data Sheet dated: 08/15/2025 - version 11
Date of first edition: 05/08/2015

1. IDENTIFICATION

Product identifier used on the label

Mixture identification:

Trade name: MAPEFLOOR FINISH 450 / B

Trade code: 906UA9999

Recommended use of the chemical and restrictions on use

Recommended use: Solvent free protective paint

Restrictions on use: Not available

Name, U.S. address, and U.S. 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 toxicity (inhalation), Category 2	Fatal if inhaled.
Skin irritation, Category 2	Causes skin irritation.
Eye irritation, Category 2A	Causes serious eye irritation.
Respiratory Sensitization, Category 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sensitization, Category 1	May cause an allergic skin reaction.
Specific target organ toxicity following single exposure, Category 3	May cause respiratory irritation.

Label elements

Hazard pictograms and Signal Word

Danger

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
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.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
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.
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 doctor.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	UN5$P337+P313
P342+P311	If experiencing respiratory symptoms: Call a doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with applicable regulations.

Hazards associated with foreseeable chemical reactions

None

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Not Relevant

Mixtures

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

List of components

Qty	Name	Ident. Numb.	Classification
≥80 - <100 %	methylene bis(4-cyclohexylisocyanate); 1, 1-Methylene bis(4-isocyanatocyclohexane)	CAS:5124-30-1 EC:225-863-2 EU CLP Index:615-009-00-0	Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Sens. 1, H317; Acute Tox. 2, H330; Resp. Sens. 1, H334

The actual concentration of the components listed above is withheld as a trade secret.

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.

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 opthalmologist 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

Skin Irritation

Erythema

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 (CO_2).

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: Not available

Explosive properties: Not Relevant

Oxidizing properties: Not Relevant

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

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.

Storage temperature: Not available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
methylene bis(4-cyclohexylisocyanate); 1,1-Methylene bis(4-isocyanatocyclohexane) CAS: 5124-30-1	ACGIH		Long Term: 0.005 ppm lower respiratory tract irritation;respiratory sensitization;

ACGIH		Long Term: 0.005 ppm lower respiratory tract irritation;respiratory sensitization
MAK	AUSTRIA	Long Term: 0.054 mg/m3 - 0.005 ppm; Short Term: 0.054 mg/m3 - 0.005 ppm
MAK	AUSTRIA	Short Term: Ceiling - 0.054 mg/m3 - 0.005 ppm
MAK	SWITZERLAND	Long Term: 0.02 mg/m3
EU		Long Term: 0.006 mg/m3; Short Term: 0.012 mg/m3 Skin; Dermal and respiratory sensitisation

Appropriate engineering controls: Not available

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use contact lenses.

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 >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

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:	liquid clear
Odour:	odourless
Odour threshold:	Not Relevant
pH (water dispersion, 10%):	No data available
Melting point / freezing point:	Not Relevant
Initial boiling point and boiling range:	200 °C (392 °F)
Flammability:	Not Relevant
Upper/lower flammability or explosive limits:	Not Relevant
Flash point:	200 °C (392 °F)
Vapour density:	9.4
Auto-ignition temperature:	470.00 °C
Decomposition temperature:	Not Relevant
pH:	Not Relevant
Kinematic viscosity:	> 20,5 mm2/sec (40 °C)
Solubility in water:	reacts with water
Solubility in oil:	soluble
Partition coefficient (n-octanol/water):	Not Relevant
Viscosity:	Not Relevant
Explosive properties:	Not Relevant

Oxidizing properties:	Not Relevant
Solid/gas flammability:	Not Relevant
Vapour pressure:	Not Relevant
Evaporation rate:	Not Relevant
Relative density:	1.20 g/cm3
Relative vapour density:	9.4

Particle characteristics:

Particle size:	No data available

Other information

Substance Groups relevant properties	Not Relevant
Miscibility:	Not Relevant
Fat Solubility:	Not Relevant
Conductivity:	Not Relevant

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	The product is classified: Acute toxicity (inhalation), Category 2(H330)
	ATEmix - Inhalation (Vapours) : 0.571429 mg/l
b) skin corrosion/irritation	The product is classified: Skin irritation, Category 2(H315)
c) serious eye damage/irritation	The product is classified: Eye irritation, Category 2A(H319)
d) respiratory or skin sensitisation	The product is classified: Respiratory Sensitization, Category 1(H334), Skin Sensitization, Category 1(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	The product is classified: Specific target organ toxicity following single exposure, Category 3(H335)
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:

methylene bis(4-cyclohexylisocyanate); 1,1-Methylene bis(4-isocyanatocyclohexane)	a) acute toxicity	LC50 Inhalation Rat = 434 mg/l 4h
		LD50 Skin Rabbit > 10000 mg/kg
		LD50 Oral Rat = 1065 mg/kg
		LD50 Skin Rabbit > 10000 mg/kg
		LC50 Inhalation Rat = 434 mg/m3 4h
		LD50 Oral Rat = 9900 mg/kg
		LD50 Skin Rat > 7000 mg/kg
		LC50 Inhalation Rat = 434 mg/m3 4h

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 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
methylene bis(4-cyclohexylisocyanate); 1,1-Methylene bis(4-isocyanatocyclohexane)	CAS: 5124-30-1 - EINECS: 225-863-2 - INDEX: 615-009-00-0	a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio = 1.2 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio 1.2 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio = 1.2 mg/L 96h IUCLID - static
		a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio 1.2 mg/L 96h IUCLID - 1.2 - 2.76

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.

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14. TRANSPORT INFORMATION

UN number

DOT-UN Number: NA3082

ADR-UN number: NA3082

IATA-Un number: -

IMDG-Un number: -

UN proper shipping name

DOT-Proper Shipping Name: Other regulated substances, liquid, n.o.s (aliphatic polyisocyanates)

ADR-Shipping Name: - (aliphatic polyisocyanates)

IATA-Technical name: - (aliphatic polyisocyanates)

IMDG-Technical name: - (aliphatic polyisocyanates)

Transport hazard class(es)

DOT-Hazard Class: 9

ADR-Class: -

IATA-Class: -

IMDG-Class: -

Packing group

DOT Packing Group: III

ADR-Packing Group: -

IATA-Packing group: -

IMDG-Packing group: -

Environmental hazards

Marine pollutant: No

Environmental Pollutant: Not Applicable

DOT-RQ: No

Transport in bulk according to IMO instruments

N.A.

Not Applicable

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): A189, IB3, T2, TP1

DOT-Label(s): 9

DOT-Symbol: N/A

DOT-Cargo Aircraft: No limit

DOT-Passenger Aircraft: No limit

DOT-Bulk: 241

DOT-Non-Bulk: 203

DOT-Limited Quantity threshold: N/A

Road and Rail (ADR-RID) :

ADR-Label: -

ADR-Hazard identification number: -

ADR-Transport category (Tunnel restriction code): -

Air (IATA) :

IATA-Passenger Aircraft: -

IATA-Cargo Aircraft: -

IATA-Label: -

IATA-Subsidiary hazards: -
IATA-Erg: -
IATA-Special Provisioning: -

Sea (IMDG) :

IMDG-Stowage and handling: -
IMDG-Segregation: -
IMDG-Subsidiary hazards: -
IMDG-Special Provisioning: -
IMDG-EMS: -

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15. REGULATORY INFORMATION

This Safety Data Sheet has been prepared according to the Hazard Communication Standard 2024 (HCS 2024)

USA - Federal regulations

TSCA - Toxic Substances Control Act

All the components are listed on the TSCA inventory

TSCA listed substances:

methylene bis(4-cyclohexylisocyanate); 1,1-Methylene bis(4-isocyanatocyclohexane)	is listed in TSCA	Section 8b Section 8a - PAIR Section 5

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

No substances listed

Section 304 - Hazardous substances:

No substances listed

Section 313 - Toxic chemical list:

methylene bis(4-cyclohexylisocyanate); 1,1-Methylene bis(4-isocyanatocyclohexane)

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

No substances listed

CAA - Clean Air Act

CAA listed substances:

No substances listed

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:

methylene bis(4-cyclohexylisocyanate); 1,1-Methylene bis(4-isocyanatocyclohexane)

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

methylene bis(4-cyclohexylisocyanate); 1,1-Methylene bis(4-isocyanatocyclohexane)

New Jersey Right to know

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

methylene bis(4-cyclohexylisocyanate); 1,1-Methylene bis(4-isocyanatocyclohexane)

Canada - Federal regulations

DSL - Domestic Substances List

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

This product complies with NDSL inventory

NPRI - National Pollutant Release Inventory

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

No substances listed

16. OTHER INFORMATION

Safety Data Sheet dated: 8/15/2025 - version 11

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.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

Code	Hazard class and hazard category	Description
A.1/2/Inhal	Acute Tox. 2	Acute toxicity (inhalation), Category 2
A.2/2	Skin Irrit. 2	Skin irritation, Category 2
A.3/2A	Eye Irrit. 2A	Eye irritation, Category 2A
A.4.1/1	Resp. Sens. 1	Respiratory Sensitization, Category 1
A.4.2/1	Skin Sens. 1	Skin Sensitization, Category 1
A.8/3	STOT SE 3	Specific target organ toxicity following single exposure, Category 3

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.
EU CLP Index: Index number as reported in Annex VI to EU Reg. 1272/2008
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:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION

- 16. OTHER INFORMATION