

## Safety Data Sheet

### MAPEWRAP 21 / A

Safety Data Sheet dated: 06/24/2024 - version 5

Date of first edition: 05/27/2015



## 1. IDENTIFICATION

### Product identifier

Mixture identification:

Trade name: MAPEWRAP 21 / A

Trade code: 9073241

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

Recommended use: Epoxy resins

Restrictions on use: Not available

### 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

Skin irritation, Category 2

Causes skin irritation.

Eye irritation, Category 2A

Causes serious eye irritation.

Skin Sensitization, Category 1B

May cause an allergic skin reaction.

Acute aquatic hazard, category 2

Toxic to aquatic life

Chronic (long term) aquatic hazard, category 2

Toxic to aquatic life with long lasting effects.

### Label elements

#### Hazard pictograms and Signal Word



Warning

### Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H401 Toxic to aquatic life

H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements

P261 Avoid breathing mist/vapours/spray.

P264 Wash skin thoroughly after handling.

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

P273 Avoid release to the environment.

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

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.  
P363 Wash contaminated clothing before reuse.  
P391 Collect spillage.  
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

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### 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
50-75 %	bis-[4-(2,3-epoxipropoxy)phenyl]propane	CAS:1675-54-3, 25085-99-8 EC:216-823-5 Index:603-073-00-2	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2A, H319; Aquatic Chronic 2, H411; Aquatic Acute 2, H401
25-50 %	1,6-bis(2,3-epoxypropoxy)hexane; 1,6-Hexanediol diglycidyl ether	CAS:16096-31-4 EC:240-260-4	Eye Irrit. 2A, H319; Skin Irrit. 2, H315; Aquatic Chronic 3, H412; Skin Sens. 1B, H317
10-20 %	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS:9003-36-5 EC:701-263-0	Skin Irrit. 2, H315; Aquatic Chronic 2, H411; Skin Sens. 1, H317

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### 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 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:

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

**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)

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### 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: 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.

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**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

Remove persons to safety.

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.

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**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.

Storage temperature: Not available

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Predicted No Effect Concentration (PNEC) values**

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol  
CAS: 9003-36-5

Exposure Route: Fresh Water; PNEC Limit: 0.003 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 0.294 mg/kg

Exposure Route: Marine water; PNEC Limit: 0.0003 mg/l

Exposure Route: Marine water sediments; PNEC Limit: 0.0294 mg/kg

Exposure Route: Soil; PNEC Limit: 0.237 mg/kg

Appropriate engineering controls: Not available

**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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state: Liquid  
Appearance and colour: liquid Yellow  
Odour: Characteristic  
Odour threshold: Not Relevant  
pH: Not Relevant  
Melting point / freezing point: Not Relevant  
Initial boiling point and boiling range: Not Relevant  
Flash point:  $100\text{ }^{\circ}\text{C}$  ( $212\text{ }^{\circ}\text{F}$ )  
Evaporation rate: Not Relevant  
Upper/lower flammability or explosive limits: Not Relevant  
Vapour density: Not Relevant  
Vapour pressure: Not Relevant  
Relative density:  $1.11\text{ g/cm}^3$   
Solubility in water: Insoluble  
Solubility in oil: Not Relevant  
Partition coefficient (n-octanol/water): Not Relevant  
Auto-ignition temperature: Not Relevant  
Decomposition temperature: Not Relevant  
Viscosity: Not Relevant  
Explosive properties: Not Relevant  
Oxidizing properties: Not Relevant  
Solid/gas flammability: Not Relevant

### Other information

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

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## 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.

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## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Toxicological Information of the Preparation

- |                              |  |
|------------------------------|--|
| a) acute toxicity            | Not classified<br>Based on available data, the classification criteria are not met |
| 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: Skin Sensitization, Category 1B(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:

bis-[4-(2,3-epoxipropoxy)phenyl]propane	a) acute toxicity	LD50 Skin Rabbit = 20 mg/kg
		LD50 Oral Rat = 11300 µL/kg
1,6-bis(2,3-epoxypropoxy)hexane; 1,6-Hexanediol diglycidyl ether	a) acute toxicity	LD50 Oral Rat 300 mg/kg
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
		LD50 Skin Rat > 2000 mg/kg
	i) STOT-repeated exposure	NOAEL Oral = 250 mg/kg

#### Substance(s) listed on the IARC Monographs:

bis-[4-(2,3-epoxipropoxy)phenyl]propane	Group 3
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#### 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

The product is classified: Acute aquatic hazard, category 2(H401), Chronic (long term) aquatic hazard, category 2(H411)

#### List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
bis-[4-(2,3-epoxipropoxy)phenyl]propane	CAS: 1675-54-3, 25085-99-8	a) Aquatic acute toxicity : LC50 Fish = 2 mg/L 96h -

EINECS: 216-823-5 - INDEX: 603-073-00-2

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

CAS: 9003-36-5  
- EINECS: 701-263-0

a) Aquatic acute toxicity : EC50 Daphnia = 1.8 mg/L 48h

a) Aquatic acute toxicity : LC50 Fish = 5.7 mg/L 96h

a) Aquatic acute toxicity : EC50 Daphnia = 2.55 mg/L 48h

a) Aquatic acute toxicity : EC50 Algae = 1.8 mg/L 72h

#### **Persistence and degradability**

N.A.

#### **Bioaccumulative potential**

N.A.

#### **Mobility in soil**

N.A.

#### **Other adverse effects**

N.A.

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### **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: UN3082

ADR-UN number: 3082

IATA-Un number: 3082

IMDG-Un number: 3082

#### **UN proper shipping name**

DOT-Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (epoxy resins)

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

#### **Transport hazard class(es)**

DOT-Hazard Class: 9

ADR-Class: 9

IATA-Class: 9

IMDG-Class: 9

#### **Packing group**

DOT Packing Group: III

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

### Environmental hazards

Marine pollutant: Yes

Environmental Pollutant: Not Applicable

DOT-RQ: No

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

Not Applicable

### Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): 8, 146, 173, 335, IB3, T4, TP1, TP29

DOT-Label(s): 9

DOT-Symbol: N/A

DOT-Cargo Aircraft: N/A

DOT-Passenger Aircraft: N/A

DOT-Bulk: N/A

DOT-Non-Bulk: N/A

DOT-Limited Quantity threshold: 5 L

Road and Rail (ADR-RID):

ADR exempt: No

ADR-Label: 9

ADR-Hazard identification number: 90

ADR-Transport category (Tunnel restriction code): 3 (E)

Air (IATA):

IATA-Passenger Aircraft: 964

IATA-Cargo Aircraft: 964

IATA-Label: 9

IATA-Subsidiary hazards: -

IATA-Erg: 9L

IATA-Special Provisions: A97 A158 A197

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 274 335

IMDG-EMS: F-A, S-F

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## 15. REGULATORY INFORMATION

### USA - Federal regulations

#### TSCA - Toxic Substances Control Act

All the components are listed on the TSCA inventory

##### TSCA listed substances:

bis-[4-(2,3-epoxypropoxy)phenyl]propane is listed in TSCA Section 8b

1,6-bis(2,3-epoxypropoxy)hexane; is listed in TSCA Section 8b Section 5a - SNUR Section 12b  
1,6-Hexanediol diglycidyl ether

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol is listed in TSCA Section 8b

#### 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:

No substances listed

#### 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:**

No substances listed

**Pennsylvania Right to know****Substance(s) listed under Pennsylvania Right to know:**

No substances listed

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

No substances listed

**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

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**16. OTHER INFORMATION**

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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.	
H401	Toxic to aquatic life	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Code	Hazard class and hazard category	Description
A.2/2	Skin Irrit. 2	Skin irritation, Category 2
A.3/2A	Eye Irrit. 2A	Eye irritation, Category 2A
A.4.2/1	Skin Sens. 1	Skin Sensitization, Category 1
A.4.2/1B	Skin Sens. 1B	Skin Sensitization, Category 1B
US-HAE/A2	Aquatic Acute 2	Acute aquatic hazard, category 2
US-HAE/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
US-HAE/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, 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.  
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
- 5. FIRE-FIGHTING MEASURES
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION