

Safety Data Sheet

MAPEFLEX EMC-1

Safety Data Sheet dated: 11/09/2023 - version 1

Date of first edition: 11/09/2023



1. IDENTIFICATION

Product identifier used on the label

Mixture identification:

Trade name: MAPEFLEX EMC-1

Trade code: 9076040

Recommended use of the chemical and restrictions on use

Recommended use: Coating

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 aquatic hazard, category 3

Harmful to aquatic life

Chronic (long term) aquatic hazard, category 3

Harmful to aquatic life with long lasting effects.

Label elements

Hazard statements

H402 Harmful to aquatic life

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P273 Avoid release to the environment.

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

P308+P313 IF exposed or concerned: Get medical advice/attention.

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

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

This product contains titanium dioxide which IARC has classified as a Group 2B carcinogen (possibly carcinogenic to humans). Evidence is based on sufficient animal testing as a result of long-term inhalation at high concentrations of respirable amounts of titanium dioxide. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a dust hazard)

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
2.5-5 %		CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	Carc. 2, H351
1-2.5 %	zinc oxide; oxozinc	CAS:1314-13-2 EC:215-222-5 Index:030-013-00-7	Aquatic Acute 1, H400; Aquatic Chronic 1, H410
0.49-1 %		CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372; Carc. 1A, H350

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

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

Not available

Indication of any immediate medical attention and special treatment needed

Treatment: Not available

(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: Not available

Explosive properties: Not available

Oxidizing properties: Not available

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.

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.

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.

Storage temperature: Not available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
CAS: 13463-67-7	OSHA		Long Term: 15 mg/m3
	ACGIH		Long Term: 10 mg/m3 A4 - Not Classifiable as a Human Carcinogen;lower respiratory tract irritation;
	MAK	GERMANY	Long Term: 0.3 mg/m3
	ACGIH		Long Term: 10 mg/m3 A4 - Not Classifiable as a Human Carcinogen;lower respiratory tract irritation
	MAK	AUSTRIA	Long Term: 5 mg/m3; Short Term: 10 mg/m3
zinc oxide; oxozinc CAS: 1314-13-2	MAK	SWITZERLAND	Long Term: 3 mg/m3
	ACGIH		Long Term: 2 mg/m3; Short Term: 10 mg/m3 (R) - Metal fume fever
	OSHA		Long Term: 5 mg/m3
	OSHA		Long Term: 15 mg/m3
	ACGIH		Long Term: 2 mg/m3; Short Term: 10 mg/m3 metal fume fever
	MAK	AUSTRIA	Long Term: 5 mg/m3
	MAK	SWITZERLAND	Long Term: 3 mg/m3
	ACGIH		Long Term: 0.025 mg/m3 A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;
	ACGIH		Long Term: 0.025 mg/m3 A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
	MAK	AUSTRIA	Long Term: 0.15 mg/m3
CAS: 14808-60-7	MAK	SWITZERLAND	Long Term: 0.15 mg/m3

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 $\geq 0,5\text{mm}$; 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid
Appearance and colour: No data available
Odour: characteristic
Odour threshold: No data available
pH: No data available
Melting point / freezing point: No data available
Initial boiling point and boiling range: 100 °C (212 °F)
Flash point: 100 °C (212 °F)
Evaporation rate: No data available
Upper/lower flammability or explosive limits: No data available
Vapour density: >1.0
Vapour pressure: 760,00 (kPa 50°C) @100C
Relative density: 1,44 g/cm³
Solubility in water: dispersible
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

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	Not classified Based on available data, the classification criteria are not met

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:

	a) acute toxicity	LD50 Oral Rat > 10000 mg/kg
zinc oxide; oxozinc	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg LC50 Inhalation Rat > 5.7 mg/l 4h
	a) acute toxicity	LD50 Oral Rat = 500 mg/kg

Substance(s) listed on the IARC Monographs:

Group 2B
Group 1

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

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

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

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 3(H402), Chronic (long term) aquatic hazard, category 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
zinc oxide; oxozinc	CAS: 1314-13-2 - EINECS: 215-222-5 - INDEX: 030-013-00-7	a) Aquatic acute toxicity : EC50 Daphnia = 0.413 mg/L 48h
		a) Aquatic acute toxicity : LC50 Algae = 0.136 mg/L 72h a) Aquatic acute toxicity : LC50 Fish Danio rerio = 1.55 mg/L 96h ECHA
	CAS: 14808-60-7 - EINECS: 238-878-4	a) Aquatic acute toxicity : LC50 carp > 10000 mg/L 72h

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

Not classified as dangerous in the meaning of transport regulations.

UN number

DOT-UN Number: Not Applicable

ADR-UN number: Not Applicable

IATA-Un number: Not Applicable

IMDG-Un number: Not Applicable

UN proper shipping name

DOT-Proper Shipping Name: Not Applicable

ADR-Shipping Name: Not Applicable

IATA-Technical name: Not Applicable

IMDG-Technical name: Not Applicable

Transport hazard class(es)

DOT-Hazard Class: Not Applicable

ADR-Class: Not Applicable

IATA-Class: Not Applicable

IMDG-Class: Not Applicable

Packing group

DOT Packing Group: Not Applicable

ADR-Packing Group: Not Applicable

IATA-Packing group: Not Applicable

IMDG-Packing group: Not Applicable

Environmental hazards

Marine pollutant: No

Environmental Pollutant: Not Applicable

DOT-RQ: Not Applicable

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

Not Applicable

Special precautions

Department of Transportation (DOT):

Not Applicable

Road and Rail (ADR-RID) :

Not Applicable

Air (IATA) :
Not Applicable

Sea (IMDG) :
Not Applicable

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

All the components are listed on the TSCA inventory

TSCA listed substances:

	is listed in TSCA	Section 8b
zinc oxide; oxozinc	is listed in TSCA	Section 8b
	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:

zinc oxide; oxozinc

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:

zinc oxide; oxozinc	is listed in CWA	Section 307
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USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

Listed as carcinogen
Listed as carcinogen

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

zinc oxide; oxozinc

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

zinc oxide; oxozinc

New Jersey Right to know

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

zinc oxide; oxozinc

Canada - Federal regulations

DSL - Domestic Substances List

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.

16. OTHER INFORMATION

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Additional classification information

NFPA Health: 1 = Slight

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 0 = Minimal

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
H350	H350
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
A.6/1A	Carc. 1A	Carcinogenicity, Category 1A
A.6/2	Carc. 2	Carcinogenicity, Category 2
A.9/1	STOT RE 1	Specific target organ toxicity following repeated exposure, Category 1
US-HAE/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
US-HAE/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1

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.