

Safety Data Sheet

In accordance with GB/T 16483-2008, GB/T 17519-2013

MAPEFLOOR I 390 EDF CN /A

Safety Data Sheet dated: 21/09/2023 - version 1

Date of first edition: 21/09/2023



1. Chemical Product and company Identification

Product identifier

Mixture identification:

Trade name: MAPEFLOOR I 390 EDF CN /A

Trade code: 905GA9990

Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Epoxy paint

Uses advised against: N.A.

Details of the supplier of the safety data sheet

Company: MAPEI CHINA – Mapei Construction Materials (Guangzhou) Co., Ltd
No. 6, Fengying Road, Guangdong Conghua Economy Development Zone,
Conghua District, Guangzhou, Guangdong Province, China

Phone: 86-20-8781 0701

Responsible: enquiry@mapei.com.cn

Emergency telephone number

Phone: 86-20-8781 0701

2. Hazards identification



Emergency overview:

N.A.

Classification of the substance or mixture

Skin irritation, Category 2

Causes skin irritation.

Eye irritation, Category 2A

Causes serious eye irritation.

Skin Sensitisation, 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 hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/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.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with applicable regulations.

Hazards identification:

Physical hazards: N.A.
Health hazards: N.A.
Environmental hazards: N.A.

Other hazards

No PBT or vPvB substances present in concentration $\geq 0.1\%$

Other Hazards: No other hazards

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 preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

3. Composition/information on ingredients

Substances

N.A.

Mixtures

Mixture identification: MAPEFLOOR I 390 EDF CN /A

List of components

Qty	Name	Ident. Numb.	Classification	Registration Number
$\geq 25 - < 50$ %	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	01-2119456619-26-XXXX
$\geq 5 - < 10$ %	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	01-2119454392-40-XXXX
$\geq 2.5 - < 5$ %	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS:68609-97-2 EC:271-846-8 Index:603-103-00-4	Skin Irrit. 2, H315; Skin Sens. 1B, H317	01-2119485289-22-XXXX
$\geq 1 - < 2.5$ %	benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H332; Acute Tox. 4, H302; Eye Irrit. 2A, H319	01-2119492630-38-XXXX

4. First aid measures

Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
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 and effects, both acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

Advices for first aid responders

N.A.

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. Firefighting measures

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 substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Advice for firefighters and protective measures

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.

Precautionary measures to prevent the occurrence of secondary hazard

N.A.

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

No data available

Exposure controls

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; 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 $\geq 480\text{min}$.

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).

Hygienic and Technical measures

N.A.

Appropriate engineering controls:

N.A.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: paste various

Odour: Characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 100 °C (212 °F)

Flash point: 100.1 °C (212.2 °F)

Evaporation rate: N.A.

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

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.60 g/cm³

Solubility in water: Insoluble

Solubility in oil: soluble

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: 8,000.00 mPA-s

Kinematic viscosity: > 20,5 mm²/sec (40 °C) mm²/s

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

Volatile Organic compounds - VOCs = N.A.

Other information

Substance Groups relevant properties N.A.

Miscibility: N.A.

Conductivity: N.A.

10. Stability and reactivity

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	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 Sensitisation, 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
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
	i) STOT-repeated exposure	LD50 Skin Rat > 2000 mg/kg NOAEL Oral = 250 mg/kg
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	a) acute toxicity	LD50 Oral Rat = 19200 mg/kg
		LD50 Skin Rabbit = 4000 mg/kg
benzyl alcohol	a) acute toxicity	LC50 Inhalation Mist Rat = 11 mg/l 4h LD50 Oral Rat = 1230 mg/kg
	g) reproductive toxicity	NOAEL Rat = 1072 mg/m3

12. Ecological information

Toxicity

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

Eco-Toxicological Information:

Toxic to aquatic life

Toxic to aquatic life with long lasting effects.

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 - EINECS: 216-823-5 - INDEX: 603-073-00-2	a) Aquatic acute toxicity : LC50 Fish = 2 mg/L 96h

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
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS: 68609-97-2 - EINECS: 271-846-8 - INDEX: 603-103-00-4	a) Aquatic acute toxicity : EC50 Daphnia = 2.55 mg/L 48h a) Aquatic acute toxicity : EC50 Algae = 1.8 mg/L 72h a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96h
benzyl alcohol	CAS: 100-51-6 - EINECS: 202-859-9 - INDEX: 603-057-00-5	a) Aquatic acute toxicity : EL50 Daphnia = 7.2 mg/L 48h a) Aquatic acute toxicity : EC50 Algae = 843 mg/L 72h b) Aquatic chronic toxicity : NOEC Algae = 500 mg/L 72h a) Aquatic acute toxicity : EC50 Daphnia = 230 mg/L 48h
		a) Aquatic acute toxicity : LC50 Fish = 770 mg/L 1 a) Aquatic acute toxicity : EC50 Algae = 770 mg/L 72 a) Aquatic acute toxicity : LC50 Fish = 460 mg/L 96 a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 460 mg/L 96h EPA

Persistence and degradability

Component	Persistence/Degradability:
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Readily biodegradable

Bioaccumulative potential

Component	Bioaccumulation
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Not bioaccumulative

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

3082

UN proper shipping name

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)

ADR-Class: 9
IATA-Class: 9
IMDG-Class: 9

Packing group

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

Environmental hazards

Marine pollutant: Yes
Environmental Pollutant: Yes

Special precautions for user

Road and Rail (ADR-RID):
ADR-Label: 9
ADR-Hazard identification number: 90
ADR-Special Provisions: 274 335 375 601
ADR-Transport category (Tunnel restriction code): 3 (-)
ADR-Limited Quantity threshold: 5 L

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 A215

Sea (IMDG):

IMDG-Stowage Code: Category A
IMDG-Stowage Note: -
IMDG-Subsidiary hazards: -
IMDG-Special Provisions: 274 335 969
IMDG-EMS: F-A, S-F

These substances, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids, or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to provisions of ADR, IMDG and IATA DGR.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical classification, hazard labelling and precautionary statements according to GB30000.2-2013 ~ GB30000.29-2013.

Catalogue of Hazardous Chemicals:

Substance(s) listed under Catalogue of Hazardous Chemicals:

bis-[4-(2,3-epoxypropoxy)phenyl]propane	1675-54-3
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	9003-36-5
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2
benzyl alcohol	100-51-6

Catalogue of Highly Toxic Chemicals:

Substance(s) listed under Catalogue of Highly Toxic Chemicals:

No substance(s) listed.

16. Other information

Code	Description
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2A	Eye Irrit. 2A	Eye irritation, Category 2A
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
4.1/A2	Aquatic Acute 2	Acute aquatic hazard, category 2
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2

Date of revision of this SDS: . 9/21/2023

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

This SDS complies with "Safety data sheet for chemical product – Content and order of sections" (GB/T 16483-2008) and "Guidance on the compilation of safety data sheet for chemical products" (GB/T 17519-2013). The classification of the product in this SDS complies with "Rules for classification and labelling of chemicals" (GB30000.2-2013 ~ GB30000.29-2013).

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

Legend to abbreviations and acronyms used in the safety data sheet:

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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.

Disclaimer:

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.