

Safety Data Sheet MAPEFLOOR I309 CR/A

Safety Data Sheet dated 31/5/2017, version 3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: MAPEFLOOR I309 CR/A

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

Recommended use:

Epoxy paint.

Uses advised against:

==

1.3. Details of the supplier of the safety data sheet

Supplier:

MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel: +39-02-376731

Fax: +39-02-37673.214

Competent person responsible for the safety data sheet:

sicurezza@mapei.it

1.4. Emergency telephone number

MAPEI S.p.A. - Tel. +(39)02376731 - (office hours)

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- ⚠ Warning, Skin Irrit. 2, Causes skin irritation.
- ⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.
- ⚠ Warning, Skin Sens. 1, May cause an allergic skin reaction.
- ⚠ Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard Statements:

H315 Causes skin irritation.

Safety Data Sheet

MAPEFLOOR I309 CR/A

H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P314 Get medical advice/attention if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P391 Collect spillage.

Special Provisions:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Contains

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)
bisphenol F - epoxy resin: May produce an allergic reaction.
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.: May produce an allergic reaction.
4-morpholinecarbaldehyde: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

The below mentioned crystalline silica, that originally is in the shape of inhalable powder with specific exposure limits, after its mixture into the preparation doesn't involve any exposure risk.

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

$\geq 25\%$ - $< 50\%$ free crystalline silica ($\varnothing > 10 \mu$)

CAS: 14808-60-7, EC: 238-878-4

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

$\geq 25\%$ - $< 50\%$ reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)

REACH No.: 01-2119456619-26-xxxx, Index number: 603-074-00-8, CAS: 25068-38-6, EC: 500-033-5

⚠ 3.3/2 Eye Irrit. 2 H319

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317

⚠ 4.1/C2 Aquatic Chronic 2 H411

$\geq 5\%$ - $< 10\%$ bisphenol F - epoxy resin

REACH No.: 01-2119454392-40-XXXX, CAS: 9003-36-5, EC: 500-006-8

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.4.2/1A Skin Sens. 1A H317

⚠ 4.1/C2 Aquatic Chronic 2 H411

Safety Data Sheet

MAPEFLOOR I309 CR/A

>= 2.5% - < 4.99% free crystalline silica ($\text{Ø} < 10 \mu$)(*)

CAS: 14808-60-7, EC: 238-878-4

⚠ 3.9/1 STOT RE 1 H372

>= 2.5% - < 4.99% oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

REACH No.: 01-2119485289-22-XXXX, Index number: 603-103-00-4, CAS: 68609-97-2, EC: 271-846-8

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.4.2/1 Skin Sens. 1 H317

>= 1% - < 2.5% benzyl alcohol

REACH No.: 01-2119492630-38-XXXX, Index number: 603-057-00-5, CAS: 100-51-6, EC: 202-859-9

⚠ 3.1/4/Inhal Acute Tox. 4 H332

⚠ 3.1/4/Oral Acute Tox. 4 H302

⚠ 3.3/2 Eye Irrit. 2 H319

>= 0.1% - < 0.25% 4-morpholinecarbaldehyde

REACH No.: 01-2119987993-12-XXXX, CAS: 4394-85-8, EC: 224-518-3

⚠ 3.4.2/1 Skin Sens. 1 H317

>= 0.05% - < 0.1% 2-methoxy-1-methylethyl acetate

REACH No.: 01-2119475791-29-xxxx, Index number: 607-195-00-7, CAS: 108-65-6, EC: 203-603-9

⚠ 2.6/3 Flam. Liq. 3 H226

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off 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.

Wash immediately with water for at least 10 minutes.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

A suspension of activated charcoal in water, or petroleum jelly may be administered.

In case of Inhalation:

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

4.2. Most important symptoms and effects, both acute and delayed

If brought into contact with the eyes, the product causes irritation that may last for over 24 hours, and if brought into contact with the skin it causes significant inflammation with erythema, scabs, and oedema.

If brought into contact with the skin, the product may cause sensitisation of the skin.

Safety Data Sheet

MAPEFLOOR I309 CR/A

- 4.3. 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)

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
Suitable extinguishing media:
Water.
CO2 or Dry chemical fire extinguisher.
Extinguishing media which must not be used for safety reasons:
None in particular.
- 5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
The original ingredients or unidentified toxic and/or irritant compounds may be present in the combustion fumes.
- 5.3. Advice for firefighters
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.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.
- 6.2. Environmental precautions
Limit leakages with earth or sand.
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
Rapidly recover the product, wearing protective clothing.
After the product has been recovered, rinse the area and materials involved with water.
Suitable material for taking up: absorbing material, organic, sand
Wash with plenty of water.
Retain contaminated washing water and dispose it.
- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. 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.

Safety Data Sheet

MAPEFLOOR I309 CR/A

- 7.2. 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.
- 7.3. Specific end use(s)
 None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
 free crystalline silica ($\text{Ø} > 10 \mu$) - CAS: 14808-60-7
 ACGIH - TWA(8h): 0.025 mg/m³ - Notes: (R), A2 - Pulm fibrosis, lung cancer
 free crystalline silica ($\text{Ø} < 10 \mu$)(*) - CAS: 14808-60-7
 EU - TWA(8h): 0.025 mg/m³ - Notes: A2 (R) - Pulm fibrosis, lung cancer
 ACGIH - TWA(8h): 0.025 mg/m³ - Notes: (R), A2 - Pulm fibrosis, lung cancer
 2-methoxy-1-methylethyl acetate - CAS: 108-65-6
 ACGIH - TWA: 275 mg/m³, 50 ppm - STEL: 550 mg/m³, 100 ppm - Notes: Skin
 SUVA - TWA: 275 mg/m³, 50 ppm
 NDS - TWA: 260 mg/m³
 NDSC_H - TWA: 520 mg/m³
 EU - TWA(8h): 275 mg/m³, 50 ppm - STEL: 550 mg/m³, 100 ppm - Notes: Skin
- DNEL Exposure Limit Values
 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) - CAS: 25068-38-6
 Worker Industry: 8.3 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
 Worker Industry: 12.25 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
 Worker Industry: 8.3 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
 Worker Industry: 12.25 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
 Consumer: 3.571 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
 Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects
 Consumer: 3.571 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
 Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
- benzyl alcohol - CAS: 100-51-6
 Consumer: 20 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects
 Consumer: 4 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
 Worker Industry: 110 mg/m³ - Consumer: 27 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
 Worker Industry: 22 mg/m³ - Consumer: 5.4 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
 Worker Industry: 40 mg/kg - Consumer: 20 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
 Worker Industry: 8 mg/kg - Consumer: 4 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
- 4-morpholinecarbaldehyde - CAS: 4394-85-8
 Consumer: 8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic

Safety Data Sheet

MAPEFLOOR I309 CR/A

effects
 Worker Industry: 98 mg/m³ - Consumer: 29 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
 Consumer: 8 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
 2-methoxy-1-methylethyl acetate - CAS: 108-65-6
 Worker Industry: 796 mg/kg - Consumer: 320 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
 Worker Industry: 275 mg/m³ - Consumer: 33 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
 Consumer: 36 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
 Worker Industry: 550 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects
 PNEC Exposure Limit Values
 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6
 Target: Fresh Water - Value: 0.006 mg/l
 Target: Marine water - Value: 0.0006 mg/l
 Target: Freshwater sediments - Value: 0.0627 mg/kg
 Target: Marine water sediments - Value: 0.00627 mg/kg
 bisphenol F - epoxy resin - CAS: 9003-36-5
 Target: Microorganisms in sewage treatments - Value: 10 mg/l
 Target: Fresh Water - Value: 0.003 mg/l
 Target: Freshwater sediments - Value: 0.294 mg/kg
 Target: Marine water - Value: 0.0003 mg/l
 Target: Marine water sediments - Value: 0.0294 mg/kg
 Target: Soil (agricultural) - Value: 0.237 mg/kg
 oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2
 Target: Marine water - Value: 0.00072 mg/l
 Target: Fresh Water - Value: 0.0072 mg/l
 Target: Freshwater sediments - Value: 66.77 mg/kg
 Target: Marine water sediments - Value: 6.677 mg/kg
 Target: Soil (agricultural) - Value: 80.12 mg/kg
 Target: Microorganisms in sewage treatments - Value: 10 mg/l
 benzyl alcohol - CAS: 100-51-6
 Target: Fresh Water - Value: 1 mg/l
 Target: Marine water - Value: 0.1 mg/l
 Target: Freshwater sediments - Value: 5.27 mg/kg
 Target: Marine water sediments - Value: 0.527 mg/kg
 Target: Microorganisms in sewage treatments - Value: 39 mg/l
 Target: Soil (agricultural) - Value: 0.45 mg/kg
 Target: MAP2 - Value: 2.3 mg/l
 4-morpholinecarbaldehyde - CAS: 4394-85-8
 Target: Fresh Water - Value: 0.5 mg/l
 Target: Marine water - Value: 0.05 mg/l
 Target: Freshwater sediments - Value: 1.85 mg/kg
 Target: Marine water sediments - Value: 0.0764 mg/kg
 Target: MAP2 - Value: 5 mg/l
 Target: Microorganisms in sewage treatments - Value: 2000 mg/l
 2-methoxy-1-methylethyl acetate - CAS: 108-65-6
 Target: Fresh Water - Value: 0.635 mg/l
 Target: Marine water - Value: 0.0635 mg/l
 Target: Freshwater sediments - Value: 3.29 mg/kg
 Target: Marine water sediments - Value: 0.329 mg/kg
 Target: MAP2 - Value: 6.35 mg/l
 Target: Microorganisms in sewage treatments - Value: 100 mg/l

Safety Data Sheet

MAPEFLOOR I309 CR/A

Target: Soil (agricultural) - Value: 0.29 mg/kg

8.2. Exposure controls

Eye protection:

Safety goggles.

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.

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

In case of insufficient ventilation use mask with A filters (EN 14387).).

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|------------------------------------|
| Appearance: | paste |
| Colour: | various |
| Odour: | typical |
| Odour threshold: | N.A. |
| pH: | N.A. |
| Melting point / freezing point: | N.A. |
| Initial boiling point and boiling range: | N.A. |
| Solid/gas flammability: | == |
| Upper/lower flammability or explosive limits: | N.A. |
| Vapour density: | N.A. |
| Flash point: | N.A. |
| Evaporation rate: | N.A. |
| Vapour pressure: | N.A. |
| Relative density: | 1,50-1,60 g/cm ³ (23°C) |
| Vapour density (air=1): | N.A. |
| Solubility in water: | insoluble |
| Solubility in oil: | soluble |
| Viscosity: | 7000-9000 mPa.s (23°C) |
| Auto-ignition temperature: | N.A. |
| Explosion limits(by volume): | N.A. |
| Decomposition temperature: | N.A. |
| Partition coefficient (n-octanol/water): | N.A. |
| Explosive properties: | N.A. |
| Oxidizing properties: | N.A. |

9.2. Other information

| | |
|--------------|------|
| Miscibility: | N.A. |
|--------------|------|

Safety Data Sheet

MAPEFLOOR I309 CR/A

Fat Solubility: N.A.
 Conductivity: N.A.
 Substance Groups relevant properties N.A.

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
It may catch fire on contact with powerful oxidising agents.
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Route(s) of entry:

Ingestion: Yes
 Inhalation: No
 Contact: Yes

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

free crystalline silica ($\text{Ø} > 10 \mu$) - CAS: 14808-60-7

a) acute toxicity:

Test: LD50 - Route: Oral > 2000 mg/kg

Test: LD50 - Route: Skin > 2000 mg/kg

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) - CAS: 25068-38-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 15000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 23000 mg/kg

i) STOT-repeated exposure:

Test: map1 - Route: Oral - Species: Rat = 50 mg/kg

Test: map1 - Route: Skin - Species: Rat = 100 mg/kg

bisphenol F - epoxy resin - CAS: 9003-36-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 10000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

i) STOT-repeated exposure:

Test: map1 - Route: Oral = 250 mg/kg

oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 4500 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 17100 mg/kg

benzyl alcohol - CAS: 100-51-6

Safety Data Sheet

MAPEFLOOR I309 CR/A

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 2000 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 1620 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 4178 mg/l - Duration: 4h

g) reproductive toxicity:

Test: map1 - Species: Rat = 1072 mg/m³

4-morpholinecarbaldehyde - CAS: 4394-85-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 7360 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 18400 mg/kg

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

Test: LC50 - Route: Inhalation Dust - Species: Rat > 23.8 mg/l - Source: 6 h

e) germ cell mutagenicity:

Test: map1 - Route: Inhalation - Species: Rat = 1000 Ppm

g) reproductive toxicity:

Test: map1 - Route: Inhalation - Species: Rat = 500 Ppm

Corrosive/Irritating Properties:

Skin:

The product can cause irritation by contact.

Eye:

The product can cause irritation by contact

Carcinogenic Effects:

No effects are known.

Mutagenic Effects:

No effects are known.

Teratogenic Effects:

No effects are known.

Additional Information:

For this reason, the contact with the skin should be avoided. Once sensitization has occurred, exposures to small amounts of material may cause erythema and edema locally.

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

SECTION 12: Ecological information

12.1. Toxicity

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

Not available data on the mixture

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

Safety Data Sheet

MAPEFLOOR I309 CR/A

- a) Aquatic acute toxicity:
 Endpoint: LC50 - Species: Fish > 2 mg/l - Duration h: 96
 Endpoint: EC50 - Species: Daphnia > 1.8 mg/l - Duration h: 48
 Endpoint: LC50 - Species: Algae > 11 mg/l - Duration h: 72
 Endpoint: LC50 - Species: Daphnia = 1.3 mg/l - Duration h: 96
- b) Aquatic chronic toxicity:
 Endpoint: NOEC - Species: Daphnia = 0.3 mg/l
- bisphenol F - epoxy resin - CAS: 9003-36-5
- a) Aquatic acute toxicity:
 Endpoint: EC50 - Species: Fish = 2.54 mg/l - Duration h: 96
- oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2
- a) Aquatic acute toxicity:
 Endpoint: LC50 - Species: Fish > 5000 mg/l - Duration h: 96
 Endpoint: EC50 - Species: Daphnia = 7.2 mg/l - Duration h: 48
 Endpoint: EC50 - Species: Algae = 844 mg/l - Duration h: 72
 Endpoint: LC50 - Species: Fish > 1800 mg/l - Duration h: 96
- benzyl alcohol - CAS: 100-51-6
- a) Aquatic acute toxicity:
 Endpoint: EC50 - Species: Daphnia = 230 mg/l - Duration h: 48
 Endpoint: LC50 - Species: Fish = 770 mg/l - Duration h: 1
 Endpoint: EC50 - Species: Algae = 770 mg/l - Duration h: 72
 Endpoint: LC50 - Species: Fish = 460 mg/l - Duration h: 96
 Endpoint: EC50 - Species: Daphnia = 66 mg/l
- b) Aquatic chronic toxicity:
 Endpoint: NOEC - Species: Daphnia = 51 mg/l - Notes: 21 d
- 4-morpholinecarbaldehyde - CAS: 4394-85-8
- a) Aquatic acute toxicity:
 Endpoint: LC50 - Species: Fish > 500 mg/l - Duration h: 96
 Endpoint: EC50 - Species: Daphnia > 500 mg/l - Duration h: 48
 Endpoint: EC50 - Species: Algae 23880 mg/l - Duration h: 72
- 2-methoxy-1-methylethyl acetate - CAS: 108-65-6
- a) Aquatic acute toxicity:
 Endpoint: LC50 - Species: Fish = 100-180 mg/l - Duration h: 96
 Endpoint: EC50 - Species: Daphnia > 500 mg/l - Duration h: 48
 Endpoint: EC50 - Species: Algae > 1000 mg/l - Duration h: 72
 Endpoint: NOEC - Species: Algae = 1000 mg/l - Duration h: 96
- b) Aquatic chronic toxicity:
 Endpoint: NOEC - Species: Fish = 47.5 mg/l - Notes: 14 d
 Endpoint: NOEC - Species: Daphnia = 100 mg/l - Notes: 21 d

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

Not available data on the mixture

SECTION 13: Disposal considerations

13.1. Waste treatment methods

905HM0900/3

Safety Data Sheet

MAPEFLOOR I309 CR/A

Recover if possible. In so doing, comply with the local and national regulations currently in force.
 Dispose of this material and its container to hazardous or special waste collection point.
 Use appropriate container to avoid environmental contamination.
 This material and its container must be disposed of as hazardous waste.
 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.
 Disposal of hardened product (EC waste code) : 08 04 10
 Disposal of not hardened product (EC waste code) : 08 04 09
 The suggested European waste code is just based on the composition of the product.
 According to the specific process or application field a different waste code may be necessary.

SECTION 14: Transport information

- 14.1. UN number
 UN Number: 3082
- 14.2. UN proper shipping name
 ADR-Shipping Name: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID N.O.S
- 14.3. Transport hazard class(es)
 Rail/Road(RID/ADR): 9,III
 ADR-Upper number: NA
 Air (ICAO/IATA): 9, III
 Sea (IMO/IMDG): 9, III
- 14.4. Packing group
- 14.5. Environmental hazards
 Marine pollutant: No
- 14.6. Special precautions for user
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
 No

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 Dir. 98/24/EC (Risks related to chemical agents at work)
 Dir. 2000/39/EC (Occupational exposure limit values)
 Regulation (EC) n. 1907/2006 (REACH)
 Regulation (EC) n. 1272/2008 (CLP)
 Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 Regulation (EU) 2015/830
 Regulation (EU) n. 286/2011 (ATP 2 CLP)
 Regulation (EU) n. 618/2012 (ATP 3 CLP)
 Regulation (EU) n. 487/2013 (ATP 4 CLP)
 Regulation (EU) n. 944/2013 (ATP 5 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
 Restrictions related to the product:
 Restriction 3
 Restriction 40
 Restrictions related to the substances contained:
 Restriction 30
- Legislative Decree no. 81 of the 9th of April 2008 Title XI "Dangerous substances - Chapter I - Protection against chemical agents"
 Directive 2000/39/CE and s.m.i. (Professional threshold limit)
 Legislative Decree no. 152 of the 3rd of April 2006 and subsequent modifications and additions.
 (Environmental regulations)
 Directive 105/2003/CE (Seveso III): N.A.
 ADR Agreement – IMDG Code – IATA Regulation
 VOC (2004/42/EC) : N.A. g/l

Safety Data Sheet

MAPEFLOOR I309 CR/A

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Text of phrases referred to under heading 3:

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

H372 Causes damage to organs through prolonged or repeated exposure.

H332 Harmful if inhaled.

H302 Harmful if swallowed.

H226 Flammable liquid and vapour.

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 5: Firefighting measures

SECTION 6: Accidental release measures

SECTION 8: Exposure controls/personal protection

SECTION 11: Toxicological information

SECTION 12: Ecological information

SECTION 15: Regulatory information

SECTION 16: Other information

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

Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances

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

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

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

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

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

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

IATA: International Air Transport Association.

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

ICAO: International Civil Aviation Organization.

Safety Data Sheet

MAPEFLOOR I309 CR/A

| | |
|----------|---|
| ICAO-TI: | Technical Instructions by the "International Civil Aviation Organization" (ICAO). |
| IMDG: | International Maritime Code for Dangerous Goods. |
| INCI: | International Nomenclature of Cosmetic Ingredients. |
| KSt: | Explosion coefficient. |
| LC50: | Lethal concentration, for 50 percent of test population. |
| LD50: | Lethal dose, for 50 percent of test population. |
| LTE: | Long-term exposure. |
| PNEC: | Predicted No Effect Concentration. |
| RID: | Regulation Concerning the International Transport of Dangerous Goods by Rail. |
| STE: | Short-term exposure. |
| 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). |
| OEL: | Substance with a Union workplace exposure limit. |
| VLE: | Threshold Limiting Value. |
| WGK: | German Water Hazard Class. |
| TSCA: | United States Toxic Substances Control Act Inventory |
| DSL: | DSL - Canadian Domestic Substances List |
| N.A.: | Not available |