

Safety Data Sheet dated 26/5/2017, version 3

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

1.1. Product identifier

Trade name: MAPEPROOF 1K TURBO

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

Uses advised against:

==

1.3. Details of the supplier of the safety data sheet

Supplier:

MAPEI U.K. Ltd - Mapei House Steel Park Road

Halesowen - West Midlands B62 8HD

Competent person responsible for the safety data sheet:

sicurezza@mapei.it

1.4. Emergency telephone number

MAPEI U.K. Ltd - phone: +44(0)121 508 6970 fax: +44(0)121 5086 960

www.mapei.co.uk (office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture EC regulation criteria 1272/2008 (CLP)

- Warning, Acute Tox. 4, Harmful if inhaled.
- Warning, Skin Irrit. 2, Causes skin irritation.
- Warning, Eye Irrit. 2, Causes serious eye irritation.
- Danger, Resp. Sens. 1, May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Warning, Skin Sens. 1, May cause an allergic skin reaction.
- Warning, Carc. 2, Suspected of causing cancer.
- Warning, STOT SE 3, May cause respiratory irritation.
- Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure.

Adverse physicochemical, human health and environmental effects: No other hazards

2.2. Label elements

Hazard pictograms:





Danger

Hazard Statements:

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:

P201 Obtain special instructions before use.

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

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

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER.

Special Provisions:

EUH204 Contains isocyanates. May produce an allergic reaction.

Contains

diphenylmethanediisocyanate isomers and homologues

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate

benzene, 1,1'-methylenebis[isocyanato-, polymer with 1,2-ethanediamine, methyloxirane and oxirane (polymer)

Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer with

1,1-methylenebis(isocyanatobenzene)

: 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

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:

>= 10% - < 20% diphenylmethanediisocyanate isomers and homologues

Index number: 615-005-00-9, CAS: 9016-87-9, EC: 618-498-9

- 1 3.1/4/Inhal Acute Tox. 4 H332
- 1.3/2 Eye Irrit. 2 H319
- **♦** 3.8/3 STOT SE 3 H335

233210M/3



- 3.2/2 Skin Irrit. 2 H315
- 3.4.1/1-1A-1B Resp. Sens. 1,1A,1B H334
- ◆ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
- ♦ 3.9/2 STOT RE 2 H373
- 3.6/2 Carc. 2 H351

>= 10% - < 20% benzene, 1,1'-methylenebis[isocyanato-, polymer with 1,2-ethanediamine, methyloxirane and oxirane (polymer)

CAS: n.a., EC: polimero

- ◆ 3.1/4/Inhal Acute Tox. 4 H332
- 3.3/2 Eye Irrit. 2 H319
- ♦ 3.8/3 STOT SE 3 H335
- 1 3.2/2 Skin Irrit. 2 H315
- ♦ 3.4.1/1-1A-1B Resp. Sens. 1,1A,1B H334
- ◆ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
- ♦ 3.9/2 STOT RE 2 H373
- 3.6/2 Carc. 2 H351

>= 10% - < 20% Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer with 1,1-methylenebis(isocyanatobenzene)

CAS: 39420-98-9, EC: polymer

- ◆ 3.1/4/Inhal Acute Tox. 4 H332
- ◆ 3.3/2 Eye Irrit. 2 H319
- ◆ 3.2/2 Skin Irrit. 2 H315
- 3.4.1/1-1A-1B Resp. Sens. 1,1A,1B H334
- ◆ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
- **♦** 3.9/2 STOT RE 2 H373
- ♦ 3.6/2 Carc. 2 H351

>=10% - < 20% Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate

REACH No.: 01-2119457015-45-XXXX, EC: 905-806-4

- ◆ 3.1/4/Inhal Acute Tox. 4 H332
- 4 3.2/2 Skin Irrit. 2 H315
- ♦ 3.3/2 Eye Irrit. 2 H319
- ♦ 3.4.1/1 Resp. Sens. 1 H334
- ◆ 3.4.2/1 Skin Sens. 1 H317
- 3.6/2 Carc. 2 H351
- ◆ 3.8/3 STOT SE 3 H335
- ♦ 3.9/2 STOT RE 2 H373

>= 10% - < 20% 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate REACH No.: 01-2119457014-47-XXXX, Index number: 615-005-00-9, CAS: 101-68-8, EC: 202-966-0

- 3.1/4/Inhal Acute Tox. 4 H332
- 1 3.3/2 Eye Irrit. 2 H319
- **♦** 3.8/3 STOT SE 3 H335
- 1 3.2/2 Skin Irrit. 2 H315
- ♦ 3.4.1/1-1A-1B Resp. Sens. 1,1A,1B H334
- ♦ 3.9/2 STOT RE 2 H373
- 3.6/2 Carc. 2 H351



>= 0.25% - < 0.49% 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 opthalmologist immediately.

Protect uninjured eye.

Wash immediately with water for at least 10 minutes.

In case of Ingestion:

Do NOT induce vomiting.

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.

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

The product is harmful following acute exposure to it and poses a serious health threat if inhaled.

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

The product may present a risk of carcinogenesis.

If inhaled, the product may cause sensitisation of the airways, and if brought into contact with the skin it may cause sensitisation of the skin.

This product is harmful: serious harm (functional disorders or significant morphological changes that are toxicology-related) may be caused by repeated or prolonged exposure to the product by inhalation.

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.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

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.

Exercise the greatest care when handling or opening the container.

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.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

diphenylmethanediisocyanate isomers and homologues - CAS: 9016-87-9

ACGIH - TWA: 0.05 ppm

SUVA - TWA: 0.02 mg/m3 - STEL: 0.02 mg/m3

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate - CAS: 101-68-8

SUVA - TWA: 0.02 mg/m3 - STEL: 0.02 mg/m3

NDS - TWA: 0.03 mg/m3 NDSP - TWA: 0.09 mg/m3

ACGIH - TWA(8h): 0.005 ppm - Notes: Resp sens

ÁK - TWA: 0.05 mg/m3 CK - TWA: 0.05 mg/m3

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 NDSCh - TWA: 520 mg/m3

EU - TWA(8h): 275 mg/m3, 50 ppm - STEL: 550 mg/m3, 100 ppm - Notes: Skin

DNEL Exposure Limit Values

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate - CAS: 101-68-8 Worker Industry: 50 mg/kg - Exposure: Human Dermal - Frequency: Short Term,

systemic effects

Worker Industry: 0.1 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term,

systemic effects

Worker Industry: 0.1 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Industry: 0.05 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 0.05 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 25 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Consumer: 0.05 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Consumer: 20 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects Consumer: 0.05 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects

Consumer: 0.025 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 0.025 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Industry: 28.7 mg/cm2 - Consumer: 17.2 mg/cm2 - Exposure: Human Dermal - Frequency: Short Term, local 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

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate - CAS: 101-68-8

Target: Fresh Water - Value: 1 mg/l - Type of hazard: > Target: Marine water - Value: 0.1 mg/l - Type of hazard: >



Target: Soil (agricultural) - Value: 1 mg/kg - Type of hazard: >

Target: Microorganisms in sewage treatments - Value: 1 mg/l - Type of hazard: >

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

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.

Suitable materials for safety gloves; EN 374:

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.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Use adequate protective respiratory equipment.

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: liquid
Colour: brown
Odour: odourless
Odour threshold: N.A.
pH: N.A.
Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Solid/gas flammability: N.A.

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

Vapour density: N.A. Flash point: = \mathbb{C}

233210M/3



Evaporation rate: N.A.

Vapour pressure: N.A.

Relative density: 1,10-1,20 g/cm³ (23℃)

Vapour density (air=1): N.A.

Solubility in water: insoluble, reagisce

Solubility in oil: N.A.

Viscosity: 280-320 mPa.s (23℃)

Auto-ignition temperature: $== \mathcal{C}$ 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. 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 generate flammable gases on contact with elementary metals (alkalis and alkaline earth, alloys in powder or vapours) and powerful reducing agents.

It may generate toxic gases on contact with oxidising mineral acids, and powerful oxidising agents.

It may catch fire on contact with oxidising mineral acids, and 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

It releases carbon dioxide in contact with water

It polimerises on heating

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Route(s) of entry:

Ingestion: Yes Inhalation: Yes 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:

diphenylmethanediisocyanate isomers and homologues - CAS: 9016-87-9

a) acute toxicity:

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



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Test: LD50 - Route: Skin - Species: Rabbit > 9400 mg/kg
             Test: LC50 - Route: Inhalation Dust - Species: Rat = 0.31 mg/l - Duration: 4h
      g) reproductive toxicity:
             Test: map1 - Route: Inhalation - Species: Rat = 12 mg/m3
      Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer with
      1,1-methylenebis(isocyanatobenzene)
       - CAS: 39420-98-9
      a) acute toxicity:
             Test: LC50 - Route: Inhalation Mist - Species: Rat = 0.49 mg/l - Duration: 4h
             Test: LD50 - Route: Skin - Species: Rabbit > 9400 mg/kg
             Test: LD50 - Route: Oral - Species: Rat > 10000 mg/kg
      e) germ cell mutagenicity:
             Test: map1 - Species: Rat = 12 mg/m3
      4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate - CAS: 101-68-8
      a) acute toxicity:
             Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
             Test: LD50 - Route: Skin - Species: Rabbit > 9400 mg/kg
             Test: LC50 - Route: Inhalation Dust - Species: Rat = 0.368 mg/l - Duration: 4h
      b) skin corrosion/irritation:
             Test: Skin Irritant - Route: Skin - Species: Rabbit : Positive
      d) respiratory or skin sensitisation:
             Test: Skin Sensitization - Route: Skin - Species: Mouse : Positive
             Test: Respiratory Sensitization - Route: Inhalation : Positive
      f) carcinogenicity:
             Test: Carcinogenicity - Route: Inhalation - Species: Rat = 6 mg/m3 - Notes: 2 y
      g) reproductive toxicity:
             Test: map1 - Route: Inhalation - Species: Rat = 12 mg/m3 - Notes: 20 d
      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
Cancerogenic Effects:
      May cause cancer
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,
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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

diphenylmethanediisocyanate isomers and homologues - CAS: 9016-87-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 1000 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 24 Endpoint: EC50 - Species: Algae > 1640 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia > 10 mg/l - Notes: 21 d

c) Bacteria toxicity:

Endpoint: EC50 > 100 mg/l - Duration h: 3

d) Terrestrial toxicity:

Endpoint: NOEC > 1000 mg/kg - Notes: 14 d

e) Plant toxicity:

Endpoint: NOEC > 1000 mg/kg - Notes: 14 d

Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer with

1,1-methylenebis(isocyanatobenzene)

- CAS: 39420-98-9

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 24 Endpoint: LC50 - Species: Fish > 1000 mg/l - Duration h: 96

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia > 10 mg/l

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate - CAS: 101-68-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 1000 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 24 Endpoint: EC50 - Species: Algae > 1640 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia > 10 mg/l - Notes: 21 d

c) Bacteria toxicity:

Endpoint: EC50 > 100 mg/l - Duration h: 3

d) Terrestrial toxicity:

Endpoint: NOEC > 1000 mg/kg - Notes: 14 d

e) Plant toxicity:

Endpoint: NOEC > 1000 mg/kg - Notes: 14 d 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

NΑ

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

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

Disposal of not hardened product (EC waste code): 08 05 01

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

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

ADR-Upper number: NA

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

Marine pollutant: No

N.A.

14.6. Special precautions for user

Ń.A.

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)

233210M/3



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 Restriction 56

REACH Regulation (1907/2006) - All. XVII: N.A.

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

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

ΝΔ

15.2. Chemical safety assessment

No

SECTION 16: Other information

Text of phrases referred to under heading 3:

H332 Harmful if inhaled.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H315 Causes skin irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

H226 Flammable liquid and vapour.

Paragraphs modified from the previous revision:

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

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 4: First aid measures

SECTION 5: Firefighting measures

SECTION 6: Accidental release measures

SECTION 7: Handling and storage

SECTION 8: Exposure controls/personal protection

SECTION 9: Physical and chemical properties

SECTION 11: Toxicological information

SECTION 12: Ecological information

SECTION 14: Transport 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.

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