## 1. Identification

**GHS Product Identifier**

Mixture identification:

Trade name: EC PRIM PU 1K TURBO

Trade code: 902332

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

Recommended use: Polyurethane primer

Uses advised against: Data not available.

**Supplier's details**

Company: MAPEI CONSTRUCTION CHEMICALS L.L.C
P.O. BOX 73869 DUBAI - United Arab Emirates

Office: 00971 4 8156666

Factory : 00971 4 8858428

Responsable: info@mapei.ae

**Emergency phone number**

Office: 00971 4 8156666

## 2. Hazard identification

**Classification of the substance or mixture**

| | |
|---|---|
| Acute toxicity (inhalation), Category 4 | Harmful if inhaled. |
| Skin irritation, Category 2 | Causes skin irritation. |
| Eye irritation, Category 2A | Causes serious eye irritation. |
| Respiratory Sensitisation, Category 1 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin Sensitisation, Category 1 | May cause an allergic skin reaction. |
| Carcinogenicity, Category 2 | Suspected of causing cancer. |
| Specific target organ toxicity — single exposure, Category 3 | May cause respiratory irritation. |
| Specific target organ toxicity — repeated exposure, Category 2 | May cause damage to organs through prolonged or repeated exposure. |

Adverse physicochemical, human health and environmental effects:

No other hazards

**GHS label elements, including precautionary statements**

**Hazard pictograms and Signal Word**



Danger

**Hazard statements**

| | |
|---|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

**Precautionary statements**

| | |
|---|---|
| P261 | Avoid breathing mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/… |

| | |
|---|---|
| P284 | [In case of inadequate ventilation] wear respiratory protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P313 | IF exposed or concerned: Get medical advice. |
| P314 | Get medical advice/attention. if you feel unwell. |
| P321 | Specific treatment (see supplementary instructions on this label) |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. |
| P362 | Take off contaminated clothing. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P501 | Dispose of contents/container in accordance with applicable regulations. |

**Other hazards which do not result in a classification**

No other hazards

## 3. Composition/information on ingredients

**Substances**

Not Relevant

**Mixtures**

Mixture identification: EC PRIM PU 1K TURBO

**Hazardous components within the meaning of GHS revision 7 regulation and related classification:**

| Qty | Name | Ident. Numb. | Classification |
|---|---|---|---|
| ≥30 - <36 % | prepolymer based on aromatic polyisocyanate | CAS:67815-87-6<br>EC:642-899-8 | Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; STOT SE 3, H335; STOT RE 2, H373 |
| ≥25 - <30 % | diphenylmethane-4,4'-diisocyanate | CAS:101-68-8<br>EC:202-966-0<br>Index:615-005-00-9 | Acute Tox. 4, H332; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; STOT RE 2, H373; Carc. 2, H351 |
| ≥20 - <25 % | o-(p-isocyanatobenzyl)phenyl isocyanate | CAS:5873-54-1<br>EC:227-534-9<br>Index:615-005-00-9 | Carc. 2, H351; STOT RE 2, H373; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; Acute Tox. 4, H332 |
| ≥10 - <15 % | diphenylmethanediisocyanate isomers and homologues | CAS:9016-87-9<br>EC:618-498-9 | Acute Tox. 4, H332; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; STOT RE 2, H373; Carc. 2, H351 |
| ≥1 - <2.5 % | 2,2'-methylenediphenyl diisocyanate | CAS:2536-05-2<br>EC:219-799-4<br>Index:615-005-00-9 | Carc. 2, H351; STOT RE 2, H373; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; Acute Tox. 4, H332 |

## 4. First-aid measures

**Description of necessary 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 opthalmologist 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:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

**Most important symptoms/effects, acute and delayed**

Eye irritation

Eye damages

Skin Irritation

Erythema

**Indication of immediate medical attention and special treatment needed, if necessary**

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. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media:**

Water.

Carbon dioxide (CO2).

**Unsuitable extinguishing media:**

None in particular.

**Special hazards arising from the chemical**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

**Special protective actions 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.

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

Provide adequate ventilation.

Use appropriate respiratory protection.

**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.

## 7. Handling and storage

**Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not use on extensive surface areas in premises where there are occupants.

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.

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**

Always keep in a well ventilated place.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

## 8. Exposure controls/personal protection

### Control parameters

#### Community Occupational Exposure Limits (OEL)

diphenylmethane-4,4'-diisocyanate

| | | | |
|---|---|---|---|
| CAS: 101-68-8 | COL | COLOMBIA | Long Term: 0.005 ppm |
| | IDN | INDONESIA | Long Term: 0.005 ppm |
| | ISL | ICELAND | Long Term: 0.05 mg/m3 - 0.005 ppm; Short Term: 0.1 mg/m3 - 0.01 ppm |
| | MEX | MEXICO | Long Term: 0.005 ppm |
| | PAN | PANAMA | Long Term: 0.051 mg/m3 - 0.005 ppm; Short Term: 0.2 mg/m3 - 0.02 ppm |
| | PER | PERU | Long Term: 0.051 mg/m3 - 0.005 ppm |
| | RUS | RUSSIAN FEDERATION | Short Term: 0.5 mg/m3 |
| | ZAF | SOUTH AFRICA | Long Term: 0.02 mg/m3; Short Term: 0.07 mg/m3 |

#### Predicted No Effect Concentration (PNEC) values

diphenylmethane-4,4'-diisocyanate

CAS: 101-68-8
Exposure Route: Fresh Water; PNEC Limit: 1 mg/l
Exposure Route: Marine water; PNEC Limit: 0.1 mg/l
Exposure Route: Soil; PNEC Limit: 1 mg/kg
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1 mg/l
Exposure Route: Intermittent release; PNEC Limit: 10 mg/l

o-(p-isocyanatobenzyl)phenyl isocyanate

CAS: 5873-54-1
Exposure Route: Fresh Water; PNEC Limit: 1 mg/l
Exposure Route: Marine water; PNEC Limit: 0.1 mg/l
Exposure Route: Soil; PNEC Limit: 1 mg/kg
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1 mg/l

2,2'-methylenediphenyl diisocyanate

CAS: 2536-05-2
Exposure Route: Fresh Water; PNEC Limit: 1 mg/l
Exposure Route: Marine water; PNEC Limit: 0.1 mg/kg
Exposure Route: Soil; PNEC Limit: 1 mg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1 mg/l

#### Derived No Effect Level (DNEL) values

diphenylmethane-4,4'-diisocyanate

CAS: 101-68-8
Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Industry: 50 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Industry: 0.1 mg/m3

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

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

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

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

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

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 20 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Consumer: 0.05 mg/m3

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

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

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

o-(p-isocyanatobenzyl)phenyl isocyanate

CAS: 5873-54-1 Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Industry: 50 mg/kg; Consumer: 25 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Industry: 0.1 mg/m3; Consumer: 0.05 mg/m3

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

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Industry: 0.1 mg/m3; Consumer: 0.05 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 0.05 mg/m3; Consumer: 0.025 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Industry: 0.05 mg/m3; Consumer: 0.025 mg/m3

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 20 mg/kg

2,2'-methylenediphenyl diisocyanate

CAS: 2536-05-2 Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Industry: 50 mg/kg; Consumer: 25 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Industry: 0.1 mg/m3; Consumer: 0.05 mg/m3

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

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Industry: 0.1 mg/m3; Consumer: 0.05 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 0.05 mg/m3; Consumer: 0.025 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Industry: 0.05 mg/m3; Consumer: 0.025 mg/m3

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 20 mg/kg

Appropriate engineering controls: N.A.

**Individual protection measures, such as personal protective equipment (PPE)**

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; EN ISO 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.

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

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).

Use adequate protective respiratory equipment.

## 9. Physical and chemical properties

| | |
|---|---|
| Physical state: | Liquid |
| Color: | Brown |
| Odour: | Odourless |
| Melting point / freezing point: | No data available |
| Initial boiling point and boiling range: | No data available |
| Flammability: | No data available |
| Lower and upper explosion limit/flammability limits: | No data available |
| Flash point: | No data available |
| Auto-ignition temperature: | No data available |
| Decomposition temperature: | No data available |
| pH: | Not Relevant |
| Kinematic viscosity: | > 20,5 mm2/s (40 °C) |
| Solubility in water: | insoluble, reacts |
| Solubility in oil: | partly soluble |
| Partition coefficient (n-octanol/water): | No data available |
| Vapour pressure: | No data available |
| Relative density: | 1.15 g/cm3 |
| Relative vapour density: | No data available |
| Particle characteristics: | |
| Particle size: | 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 | The product is classified: Acute toxicity (inhalation), Category 4(H332) |
| | ATEmix - Inhalation (Vapours): 18.6884 mg/l |
| 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: Respiratory Sensitisation, Category 1(H334), Skin Sensitisation, Category 1(H317) |
| e) germ cell mutagenicity | Not classified |
| | Based on available data, the classification criteria are not met |

| | |
|---|---|
| f) carcinogenicity | The product is classified: Carcinogenicity, Category 2(H351) |
| g) reproductive toxicity | Not classified |
| | Based on available data, the classification criteria are not met |
| h) STOT-single exposure | The product is classified: Specific target organ toxicity — single exposure, Category 3(H335) |
| i) STOT-repeated exposure | The product is classified: Specific target organ toxicity — repeated exposure, Category 2(H373) |
| j) aspiration hazard | Not classified |
| | Based on available data, the classification criteria are not met |

**Toxicological information on main components of the mixture:**

prepolymer based on aromatic polyisocyanate

| | | |
|---|---|---|
| CAS: 67815-87-6 | a) acute toxicity | LD50 Skin Rat > 9400 mg/kg |
| | | LD50 Oral Rat > 2000 mg/kg |
| | b) skin corrosion/irritation | Skin Irritant Positive |
| | d) respiratory or skin sensitisation | Skin Sensitization Mouse Positive |
| | e) germ cell mutagenicity | NOAEL Inhalation Rat = 12 mg/m3 |

diphenylmethane-4,4'-diisocyanate

| | | |
|---|---|---|
| CAS: 101-68-8 | a) acute toxicity | LD50 Oral Rat > 2000 mg/kg |
| | f) carcinogenicity | Carcinogenicity Inhalation Rat = 6 mg/m3<br>Notes: 2 y |
| | g) reproductive toxicity | NOAEL Inhalation Rat = 12 mg/m3<br>Notes: 20 d |

o-(p-isocyanatobenzyl)phenyl isocyanate

| | | |
|---|---|---|
| CAS: 5873-54-1 | a) acute toxicity | LD50 Skin Rabbit > 9400 mg/kg |
| | | LD50 Oral Rat > 2000 mg/kg |
| | e) germ cell mutagenicity | NOAEL Inhalation Rat = 12 mg/m3 |

diphenylmethanediisocyanate isomers and homologues

| | | |
|---|---|---|
| CAS: 9016-87-9 | a) acute toxicity | LD50 Oral Rat > 10000 mg/kg |
| | | LD50 Skin Rabbit > 9400 mg/kg |
| | | LD50 Skin Rabbit > 9.4 g/kg |
| | | LD50 Oral Rat = 49 g/kg |
| | g) reproductive toxicity | NOAEL Inhalation Rat = 12 mg/m3 |

2,2'-methylenediphenyl diisocyanate

| | | |
|---|---|---|
| CAS: 2536-05-2 | a) acute toxicity | LD50 Oral Rat > 2000 mg/kg |
| | | LC50 Inhalation Vapour Rat = 527 mg/m3 4h |
| | | LD50 Skin Rabbit > 9400 mg/kg |
| | e) germ cell mutagenicity | NOAEL Inhalation Rat = 12 mg/m3 |

## 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**

Not classified for environmental hazards.

Based on available data, the classification criteria are not met

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

prepolymer based on aromatic polyisocyanate

| | |
|---|---|
| CAS: 67815-87-6 | a) Aquatic acute toxicity: LC50 Fish > 1000 mg/L 96 |
| | a) Aquatic acute toxicity: EC50 Daphnia > 1000 mg/L 24 |
| | b) Aquatic chronic toxicity: NOEC Daphnia > 10 mg/L - 21 d |
| | a) Aquatic acute toxicity: EC50 Algae > 1640 mg/L 72 |

c) Bacteria toxicity: EC50 > 100 mg/L 3

diphenylmethane-4,4'-diisocyanate

CAS: 101-68-8 a) Aquatic acute toxicity: LC50 Fish > 1000 mg/L 96

a) Aquatic acute toxicity: EC50 Daphnia > 1000 mg/L 24

b) Aquatic chronic toxicity: NOEC Daphnia > 10 mg/L - 21 d

a) Aquatic acute toxicity: EC50 Algae > 1640 mg/L 72

c) Bacteria toxicity: EC50 > 100 mg/L 3

d) Terrestrial toxicity: NOEC > 1000 mg/kg - 14 d

e) Plant toxicity: NOEC > 1000 mg/kg - 14 d

o-(p-isocyanatobenzyl)phenyl isocyanate

CAS: 5873-54-1 a) Aquatic acute toxicity: LC50 Fish > 1000 mg/L 96

a) Aquatic acute toxicity: EC50 Daphnia > 1000 mg/L 24

b) Aquatic chronic toxicity: NOEC Daphnia > 10 mg/L - 21 d

a) Aquatic acute toxicity: EC50 Algae > 1640 mg/L 72

c) Bacteria toxicity: EC50 > 100 mg/L 3

d) Terrestrial toxicity: NOEC > 1000 mg/kg - 14 d

e) Plant toxicity: NOEC > 1000 mg/kg - 14 d

diphenylmethanediisocyanate isomers and homologues

CAS: 9016-87-9 a) Aquatic acute toxicity: LC50 Fish > 1000 mg/L 96

a) Aquatic acute toxicity: EC50 Daphnia > 1000 mg/L 24

b) Aquatic chronic toxicity: NOEC Daphnia > 10 mg/L - 21 d

a) Aquatic acute toxicity: EC50 Algae > 1640 mg/L 72

c) Bacteria toxicity: EC50 > 100 mg/L 3

d) Terrestrial toxicity: NOEC > 1000 mg/kg - 14 d

e) Plant toxicity: NOEC > 1000 mg/kg - 14 d

2,2'-methylenediphenyl diisocyanate

CAS: 2536-05-2 a) Aquatic acute toxicity: LC50 Fish > 1000 mg/L 96

a) Aquatic acute toxicity: EC50 Daphnia > 1000 mg/L 24

b) Aquatic chronic toxicity: NOEC Daphnia > 10 mg/L - 21 d

a) Aquatic acute toxicity: EC50 Algae > 1640 mg/L 72

c) Bacteria toxicity: EC50 > 100 mg/L 3

e) Plant toxicity: NOEC > 1000 mg/kg - 14 d

d) Terrestrial toxicity: NOEC > 1000 mg/kg - 14 d

**Persistence and degradability**

N.A.

**Bioaccumulative potential**

N.A.

**Mobility in soil**

N.A.

**Other adverse effects**

No Data found about other evironmental hazard properties.

## 13. Disposal considerations

**Disposal 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**

N.A.

**UN proper shipping name**

N.A.

**Transport hazard class(es)**

N.A.

**Packing group, if applicable**

Road and Rail (ADR-RID):

N.A.

ADR-Hazard identification number: NA

Air (IATA):

N.A.

Sea (IMDG):

N.A.

**Environmental hazards**

Marine pollutant: No

Environmental Pollutant: N.A.

**Special precautions for user**

N.A.

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

N.A.

## 15. Regulatory information

**Safety, health and environmental regulations specific for the product in question**

This Safety Data Sheet has been prepared according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Fifth revised edition.

## 16. Other information

Safety Data Sheet dated: 9/23/2026 - version 2

| Code | Description |
|---|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H351 | Suspected of causing cancer if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure if inhaled. |

| Code | Hazard class and hazard category | Description |
|---|---|---|
| 3.1/4/Inhal | Acute Tox. 4 | Acute toxicity (inhalation), Category 4 |
| 3.2/2 | Skin Irrit. 2 | Skin irritation, Category 2 |
| 3.3/2A | Eye Irrit. 2A | Eye irritation, Category 2A |
| 3.4.1/1 | Resp. Sens. 1 | Respiratory Sensitisation, Category 1 |
| 3.4.2/1 | Skin Sens. 1 | Skin Sensitisation, Category 1 |
| 3.6/2 | Carc. 2 | Carcinogenicity, Category 2 |

| | | |
|---|---|---|
| 3.8/3 | STOT SE 3 | Specific target organ toxicity — single exposure, Category 3 |
| 3.9/2 | STOT RE 2 | Specific target organ toxicity — repeated exposure, Category 2 |

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

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

Insert here further consulted bibliography

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 SDS cancels and replaces any preceding release.

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

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

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

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

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

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

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

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

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

**Paragraphs modified from the previous revision:**

- Safety Data Sheet
- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 10. STABILITY AND REACTIVITY
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION