



SAFETY DATA SHEET

DICCODUR HARDENER

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

1.1 Product identifier

Product name : DICCODUR HARDENER

Product description : Hardener.

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

Recommended use: Painting work

Only for industrial and professional use. The product is not intended for consumer use.

1.3 Details of the supplier of the safety data sheet

Manufacturer or Distributor

Tikkurila Oyj
P.O. Box 53
FI-01301 VANTAA
FINLAND
Telephone +358 20 191 2000

e-mail address of person responsible for this SDS : Tikkurila Oyj,
Product Safety,
e-mail: productsafety@tikkurila.com

1.4 Emergency telephone number

Telephone number : 112
(24h)

Supplier or Manufacturer

Telephone number : Tikkurila Oyj
+358 20 191 2000 (GMT +2) Mon-Fri 8-16

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226

Acute Tox. 4, H332

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Resp. Sens. 1, H334


Skin Sens. 1, H317

STOT SE 3, H335

STOT SE 3, H336

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

2.2 Label elements

| | | |
|---|---|---|
| Hazard pictograms | : |  |
| Signal word | : | Danger |
| Hazard statements | : | <p>H226 - Flammable liquid and vapor. H332 - Harmful if inhaled. H319 - Causes serious eye irritation. H315 - Causes skin irritation. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness.</p> |
| Precautionary statements | | |
| General | : | Not applicable. |
| Prevention | : | <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 - Do not breathe vapor. P280 - Wear protective gloves/clothing and eye/face protection. P284 - In case of inadequate ventilation wear respiratory protection.</p> |
| Response | : | <p>P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or physician. P302 + P352 - IF ON SKIN: Wash with plenty of soap and 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.</p> |
| Storage | : | Not applicable. |
| Disposal | : | Not applicable. |
| Hazardous ingredients | : | <p>n-butyl acetate toluene diisocyanate, oligomeric reaction products with 2,2'-oxydiethanol and propylidene-trimethanol 1,2-Ethanediamine, polymer with 2,4-diisocyanato-1-methylbenzene and 2-methyloxirane Reaction mass of ethylbenzene and xylene hexamethylene diisocyanate, oligomers 4-isocyanatosulphonyltoluene toluene diisocyanate</p> |
| Supplemental label elements | : | Contains isocyanates. May produce an allergic reaction. |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : | As from 24 August 2023 adequate training is required before industrial or professional use. |
| 2.3 Other hazards | | |
| Other hazards which do not result in classification | : | None known. |

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification Regulation (EC) No. 1272/2008 [CLP] | Notes |
|---|--|-----------|--|-------|
| butyl acetate | REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1 | ≥25 - ≤50 | Flam. Liq. 3, H226 STOT SE 3, H336 EUH066 | - |
| toluene diisocyanate, oligomeric reaction products with 2,2'-oxydiethanol and propylenetriethanol | EC: 500-120-8 CAS: 53317-61-6 | ≥10 - ≤25 | Eye Irrit. 2, H319 Skin Sens. 1, H317 | - |
| 1,2-Ethanediamine, polymer with 2,4-diisocyanato-1-methylbenzene and 2-methyloxirane | CAS: 103051-64-5 | ≥10 - ≤25 | Eye Irrit. 2, H319 Skin Sens. 1, H317 | - |
| 2-methoxy-1-methylethyl acetate | REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7 | ≥10 - ≤25 | Flam. Liq. 3, H226 STOT SE 3, H336 | - |
| Reaction mass of ethylbenzene and xylene | REACH #: 01-2119488216-32 EC: 905-588-0 CAS: - | <10 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 | C |
| hexamethylene diisocyanate, oligomers | REACH #: 01-2119485796-17 EC: 931-274-8 CAS: 28182-81-2 | ≤10 | Acute Tox. 4, H332 Skin Sens. 1, H317 STOT SE 3, H335 | - |
| 4-isocyanatosulphonyltoluene | REACH #: 01-2119980050-47 EC: 223-810-8 CAS: 4083-64-1 Index: 615-012-00-7 | ≤3 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 STOT SE 3, H335 EUH014 | - |
| toluene diisocyanate | REACH #: 01-2119454791-34 EC: 247-722-4 CAS: 26471-62-5 Index: 615-006-00-4 | ≤0.3 | Acute Tox. 1, H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above. | C-2 |

Notes, if applicable, refer to Notes given in Annex VI of 1272/2008/EC.

Specific concentration limits and ATE-values

| Ingredient name, Specific concentration limits, ATE value |
|--|
| <p>toluene diisocyanate Resp. Sens. 1, H334: C ≥ 0,1 %</p> <p>4-isocyanatosulphonyltoluene Eye Irrit. 2, H319: C ≥ 5 % STOT SE 3, H335: C ≥ 5 % Skin Irrit. 2, H315: C ≥ 5 %</p> |

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

| | |
|---------------------|--|
| General | : In all cases of doubt, or when symptoms persist, seek medical attention. Show this safety data sheet or label to the doctor if possible. |
| Eye contact | : Check for and remove any contact lenses. Immediately flush eyes with plenty of lukewarm water, keeping eyelids open. Continue to rinse for at least 15 minutes. Get medical attention if symptoms occur. |
| Inhalation | : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention. |
| Skin contact | : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Get medical attention if symptoms occur. |
| Ingestion | : If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Remove to fresh air and keep at rest in a position comfortable for breathing. Do NOT induce vomiting. |

4.2 Most important symptoms and effects, both acute and delayed

Harmful if inhaled.
 Causes skin irritation.
 Causes serious eye irritation.
 May cause respiratory irritation.
 May cause an allergic skin reaction.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause drowsiness or dizziness.
 See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

| | |
|---------------------------------------|---|
| Suitable extinguishing media | : Use an extinguishing agent suitable for the surrounding fire. Recommended: Alcohol resistant foam, CO ₂ , powders or water spray/mist. |
| Unsuitable extinguishing media | : Do not use a direct water jet that could spread the fire. |

5.2 Special hazards arising from the substance or mixture

| | |
|--|--|
| Hazards from the substance or mixture | : Flammable liquid and vapor. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. |
| Hazardous combustion products | : In a fire or when exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide, smoke, oxides of nitrogen, hydrogen cyanide and isocyanate compounds. |

5.3 Advice for firefighters

| | |
|---|---|
| Special protective actions for fire-fighters | : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Do not release runoff from fire to drains or watercourses. |
| Special protective equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures** : Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Avoid breathing vapor or mist. Avoid contact with skin and eyes. See Section 8 for information on appropriate personal protective equipment.
- 6.2 Environmental precautions** : Do not allow to enter drains, water courses or soil.
- 6.3 Methods and materials for containment and cleaning up** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13).
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling** : Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. Isolate from sources of heat, sparks and open flame. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. No sparking tools should be used.
Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used. Skin contact with the product and exposure to spray mist and vapor should be avoided. Avoid contact with skin and eyes. Avoid inhalation of dust from sanding. Wear appropriate respirator when ventilation is inadequate. See Section 8 for information on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored. Wash hands before breaks and immediately after handling the product.
Precautions should be taken to minimize exposure to atmospheric humidity or water. CO₂ will be formed, which, in closed containers, could result in pressurization. Care should be taken when re-opening partly-used containers.
- 7.2 Conditions for safe storage, including any incompatibilities** : Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store and use away from heat, sparks, open flame or any other ignition source. No smoking. Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Recommended storage temperature is +5°C ...+25°C. Store in accordance with local regulations.
- 7.3 Specific end use(s)** : None.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|--|---|
| n-butyl acetate | EU OEL (Europe, 10/2019). Notes: list of indicative occupational exposure limit values STEL: 150 ppm 15 minutes. STEL: 723 mg/m ³ 15 minutes. TWA: 241 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. |
| 2-methoxy-1-methylethyl acetate | EU OEL (Europe, 10/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 50 ppm 8 hours. TWA: 275 mg/m ³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 550 mg/m ³ 15 minutes. |
| Reaction mass of ethylbenzene and xylene | EU OEL (Europe, 10/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 50 ppm 8 hours. TWA: 221 mg/m ³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m ³ 15 minutes. |

Additional information

Ethylbenzene

EU OEL (Europe, 10/2019). Absorbed through skin.

TWA: 100 ppm 8 hours.

TWA: 442 mg/m³ 8 hours.

STEL: 200 ppm 15 minutes.

STEL: 884 mg/m³ 15 minutes.

Please check your local legislation for national OEL value for ethylbenzene.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used. Provide adequate ventilation. Use explosion-proof ventilation equipment. Air-fed protective respiratory equipment must be worn by the spray operator, even when good ventilation is provided. In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn. (See Personal Protection.) Comply with the health and safety at work laws.

Individual protection measures

Eye/face protection : Use safety eyewear designed to protect against splash of liquids (EN166).

- Hand protection** : Always wear approved protective gloves against chemicals. Gloves should be replaced regularly and if there is any sign of damage to the glove material. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Recommended glove material (EN374):
< 1 hour (breakthrough time): nitrile rubber, fluor rubber
> 8 hours (breakthrough time): laminated foil
Not recommended: PVC or natural rubber (latex) gloves
- Skin protection** : Wear suitable protective clothing. This product is classified as flammable. If necessary, personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.
- Respiratory protection** : If ventilation is inadequate, use respirator that will protect against organic vapor and dust/mist. During spray-application use air-fed respirator (EN12941:1998). By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask (EN140:1998). Under cool, dry conditions, it is possible for the isocyanate to remain unreacted in the paint film over 30 hours after application. If dry flatting is unavoidable, air-fed respiratory protective equipment (EN12941:1998) should be used during sanding. Be sure to use an approved/certified respirator or equivalent. Check that mask fits tightly and change filter regularly.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Translucent.
- Odor** : Strong.
- Odor threshold** : Not relevant for the hazard assessment of the product.
- pH** : Not relevant for the hazard assessment of the product.
- Melting point/freezing point** : <-90°C (n-butyl acetate)
- Initial boiling point and boiling range** : 126°C (n-butyl acetate)
- Flash point** : 23 °C (n-butyl acetate)
- Evaporation rate** : 1 (butyl acetate = 1) (n-butyl acetate)
- Flammability (solid, gas)** : Not applicable. Product is a liquid.
- Upper/lower flammability or explosive limits** : Lower: 1.4% (n-butyl acetate)
Upper: 7.6% (n-butyl acetate)
- Vapor pressure** : 1.5 kPa [room temperature] (n-butyl acetate)
- Vapor density** : 4 (n-butyl acetate)
- Density** : 1 g/cm³
- Solubility(ies)** : insoluble in water.
- Partition coefficient: n-octanol/ water** : Not applicable.
- Auto-ignition temperature** : 415°C (n-butyl acetate)
- Decomposition temperature** : Not relevant for the hazard assessment of the product.
- Viscosity** : Not relevant for the hazard assessment of the product.
- Explosive properties** : No explosive ingredients present.
- Oxidizing properties** : No oxidizing ingredients present.

Particle characteristics

- Median particle size** : Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : See Section 10.5.
- 10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions** : May present an explosion hazard when material is suspended in air in confined areas or equipment and subjected to spark, heat or flame.
Reacts slowly with water, resulting in the production of carbon dioxide. In closed containers, pressure buildup could result in bursting of the container.
- 10.4 Conditions to avoid** : Avoid extreme heat and freezing. Avoid all possible sources of ignition (spark or flame).
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions:
oxidizing agents
strong acids
strong alkalis
amines
alcohols
- 10.6 Hazardous decomposition products** : When exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.
Fire will produce dense black smoke.
Welding, grinding and other hot work on the already-coated substrate may cause free isocyanates to be formed and released.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

There is no testdata available on the product itself.

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Repeated or prolonged skin contact may lead to allergic contact dermatitis. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting.

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|---------------------------------|---------|-------------------------|----------|
| Reaction mass of ethylbenzene and xylene | LC50 Inhalation Vapor | Rat | 11 mg/l | 4 hours |
| | LD50 Dermal | Rat | 1100 mg/kg | - |
| hexamethylene diisocyanate, oligomers | LC50 Inhalation Dusts and mists | Rat | 18500 mg/m ³ | 1 hours |

Harmful if inhaled.

Irritation/Corrosion

Causes skin irritation. Causes serious eye irritation.

Sensitization

May cause an allergic skin reaction.

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

The product contains sensitizing substances mentioned in sections 2 and 3.

Mutagenicity

Not classified.

Carcinogenicity

Not classified.

Reproductive toxicity

Not classified.

Teratogenicity

Not classified.

Specific target organ toxicity (single exposure)

May cause respiratory irritation. May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

Not classified.

Aspiration hazard

Not classified.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not applicable.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

Ecological testing has not been conducted on this product.

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

Do not allow to enter drains, water courses or soil.

12.1 Toxicity : No specific data.

Not available.

12.2 Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---------------------------------------|-------------------|------------------|------------------|
| hexamethylene diisocyanate, oligomers | - | 50%; 10.3 day(s) | Not readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | Bioconcentration factor [BCF] | Potential |
|--|--------------------|-------------------------------|-----------|
| Toluene diisocyanate | 3.43 | - | low |
| hexamethylene diisocyanate, oligomers | 5.54 | 367.7 | low |
| Reaction mass of ethylbenzene and xylene | 3.12 | 8.1 to 25.9 | low |
| 2-methoxy-1-methylethyl acetate | 1.2 | - | low |
| n-butyl acetate | 2.3 | 15 | low |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties : Not applicable.

12.7 Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : Residues in empty containers should be neutralized with a decontaminant (see section 6). Liquid residue and cleaning liquids are hazardous waste and must not be emptied into drains or sewage system, but handled in accordance with national regulations. Product residues should be left at special companies which have permission for gathering this kind of wastes.

European waste catalogue (EWC)

| Waste code | Waste designation |
|------------|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Packaging

Methods of disposal : Empty packaging should be recycled or disposed of in accordance with national regulations.

Special precautions : None.

SECTION 14: Transport information

| | ADR/RID | IMDG | IATA |
|--|------------------------|------------------------|------------------------|
| 14.1 UN number or ID number | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | PAINT RELATED MATERIAL | PAINT RELATED MATERIAL | PAINT RELATED MATERIAL |
| 14.3 Transport hazard class(es) | 3 | 3 | 3 |
| 14.4 Packing group | III | III | III |
| 14.5 Environmental hazards | No. | No. | No. |

Additional information

ADR/RID : **Tunnel code** (D/E)

IMDG : **Emergency schedules** F-E,S-E

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : As from 24 August 2023 adequate training is required before industrial or professional use.

Other EU regulations

Europe inventory : Not determined.

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Persistent Organic Pollutants

Not listed.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| | Classification | Justification |
|--|--|-----------------------|
| ✔ Flam. Liq. 3, H226 | | On basis of test data |
| Acute Tox. 4, H332 | | Calculation method |
| Skin Irrit. 2, H315 | | Calculation method |
| Eye Irrit. 2, H319 | | Calculation method |
| Resp. Sens. 1, H334 | | Calculation method |
| Skin Sens. 1, H317 | | Calculation method |
| STOT SE 3, H335 | | Calculation method |
| STOT SE 3, H336 | | Calculation method |
| Full text of abbreviated H statements | ✔ H226 Flammable liquid and vapor. H312 Harmful in contact with skin. H330 Fatal if inhaled. H332 Harmful if inhaled. H319 Causes serious eye irritation. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. | |

| | |
|---|--|
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H304 | May be fatal if swallowed and enters airways. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH014 | Reacts violently with water. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| Full text of classifications [CLP/GHS] | : |
| Acute Tox. 1 | ACUTE TOXICITY - Category 1 |
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Chronic 3 | AQUATIC HAZARD (LONG-TERM) - Category 3 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Carc. 2 | CARCINOGENICITY - Category 2 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Resp. Sens. 1 | RESPIRATORY SENSITIZATION - Category 1 |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITIZATION - Category 1 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3 |

Date of issue/ Date of revision : 7/19/2022

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Version : 5

Notice to reader

This Safety Data Sheet is prepared in accordance with Annex II (EU) No 878/2020 to Regulation (EC) No 1907/2006 (REACH). The information contained in this Safety Data Sheet is based on the present state of knowledge and current EU and national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.