Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

SAFETY DATA SHEET



UVILUX 6790-03 - TS 21333 WHITE

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

1.1 Product identifier Product name

: UVILUX 6790-03 - TS 21333 WHITE

1.2 Relevant identified uses of the substance or mixture and uses advised againstProduct use: Paint.

1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091. e-mail address of person : Prod-safe@teknos.com responsible for this SDS

National contact

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number: In an emergency, call 112

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]

Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

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

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



| Signal word | Danger | |
|--------------------------|--|-------|
| Hazard statements | H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H412 - Harmful to aquatic life with long lasting effects. | |
| Precautionary statements | | |
| Prevention | P280 - Wear protective gloves. Wear eye or face protection. P273 - Avoid release to the environment. P261 - Avoid breathing vapour. | |
| Response | P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for sev minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. | /eral |

SECTION 2: Hazards identification

| SECTION 2. Hazarus | i | IEIIIIIGAIIUII |
|---|---|---|
| Storage | 1 | Not applicable. |
| Disposal | : | P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Hazardous ingredients | : | Contains: Dipropylenglycol diacrylate; Hexamethylene diacrylate; Oligotriacrylate and (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate |
| Supplemental label elements | : | Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : | |
| 2.3 Other hazards | | |
| Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII | : | This mixture does not contain any substances that are assessed to be a PBT or a vPvB. |
| 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 | Specific Conc. Limits, M-factors and ATEs | Туре | | |
| Dipropylenglycol diacrylate | REACH #: 01-2119484629-21 EC: 260-754-3 CAS: 57472-68-1 | ≥25 - ≤50 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 | - | [1] | | |
| Hexamethylene diacrylate | REACH #: 01-2119484737-22 EC: 235-921-9 CAS: 13048-33-4 Index: 607-109-00-8 | ≥10 - <25 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 | M [Acute] = 1 | [1] | | |
| Acrylate resin | - | ≤10 | Eye Irrit. 2, H319 | - | [1] | | |
| Oligotriacrylate | REACH #: 01-2119487948-12 EC: 500-114-5 CAS: 52408-84-1 | ≤10 | Eye Irrit. 2, H319 Skin Sens. 1, H317 | - | [1] | | |
| titanium dioxide | REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 | ≤5 | Carc. 2, H351 (inhalation) | - | [1] [*] | | |
| 2-hydroxy- 2-methylpropiophenone | REACH #: 01-2119472306-39 EC: 231-272-0 CAS: 7473-98-5 | ≤3 | Acute Tox. 4, H302 Aquatic Chronic 3, H412 | ATE [Oral] = 1694 mg/kg | [1] | | |
| (1-methyl-1,2-ethanediyl)bis [oxy(methyl-2,1-ethanediyl)] diacrylate | REACH #: 01-2119484613-34 EC: 256-032-2 CAS: 42978-66-5 Index: 607-249-00-X | <1 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411 | STOT SE 3, H335: C ≥ 10% | [1] | | |
| Date of issue/Date of revision | : 07/11/2023 Date | e of previous is | sue : 09/11/2022 | Version :1.0 | 1 2/22 | | |
| UVILUX 6790-03 - TS 21333 WHITE Label No : 67777 | | | | | | | |

| SECTION 3: Composition/information on ingredients | | | | | | | |
|--|--|------|---|--|---------|--|--|
| Phosphine oxide, phenylbis (2,4,6-trimethylbenzoyl)- | REACH #: 01-2119489401-38 EC: 423-340-5 CAS: 162881-26-7 Index: 015-189-00-5 | <1 | Skin Sens. 1A, H317 Aquatic Chronic 4, H413 | - | [1] | | |
| Fatty acids, C18-unsatd., dimers, polymers with acrylic acid, bisphenol A, epichlorohydrin and nonanoic acid | CAS: 216689-76-8 | <1 | Skin Sens. 1B, H317 | - | [1] | | |
| 2-Butoxyethanol | REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0 | ≤0.3 | Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 | ATE [Oral] = 1200 mg/kg ATE [Inhalation (vapours)] = 3 mg/l | [1] [2] | | |
| | | | See Section 16 for the full text of the H statements declared above. | | | | |

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, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter \leq 10 µm not bound within a matrix.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

| Eye contact | : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. | | | | |
|--------------------------------|--|--|--|--|--|
| Inhalation | : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. | | | | |
| Skin contact | : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse. | | | | |
| Ingestion | : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head shoul be kept low so that vomit does not enter the lungs. Chemical burns must be treate promptly by a physician. Never give anything by mouth to an unconscious person If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. | | | | |
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| Protection of first-aiders | : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |
|-----------------------------|---|
| 4.2 Most important symptor | ns and effects, both acute and delayed |
| Over-exposure signs/symp | <u>otoms</u> |
| Eye contact | : Adverse symptoms may include the following: pain watering redness |
| Inhalation | : No specific data. |
| Skin contact | : Adverse symptoms may include the following: pain or irritation redness blistering may occur |
| Ingestion | : Adverse symptoms may include the following: stomach pains |
| 4.3 Indication of any immed | iate medical attention and special treatment needed |
| Notes to physician | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | : No specific treatment. |

SECTION 5: Firefighting measures

| 5.1 Extinguishing media | | |
|---|-----|---|
| Suitable extinguishing media | : | Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | : | None known. |
| 5.2 Special hazards arising f | rom | the substance or mixture |
| Hazards from the substance or mixture | : | In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. |
| Hazardous combustion products | : | Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides |
| 5.3 Advice for firefighters | | |
| Special protective actions for fire-fighters | : | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |

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SECTION 6: Accidental release measures

| SECTION 6. Accident | ai release illeasures |
|---------------------------------|---|
| 6.1 Personal precautions, pro | tective equipment and emergency procedures |
| For non-emergency personnel | : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| For emergency responders | : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| 6.2 Environmental precautions | : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. |
| 6.3 Methods and material for | containment and cleaning up |
| Small spill | : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| Large spill | : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. |
| 6.4 Reference to other sections | See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information. |

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

| Protective measures | : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. |
|--|---|
| Advice on general occupational hygiene | : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

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SECTION 7: Handling and storage

Recommendations Industrial sector specific Not available.Not available.

solutions

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|--|---|
| 2 -Butoxyethanol | Regulation on Limit Values - MAC (Austria, 4/2021). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. PEAK: 40 ppm, 4 times per shift, 30 minutes. PEAK: 200 mg/m ³ , 4 times per shift, 30 minutes. |
| Z -Butoxyethanol | Limit values (Belgium, 5/2021). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m ³ 15 minutes. |
| Z -Butoxyethanol | Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021). Absorbed through skin. Limit value 8 hours: 98 mg/m ³ 8 hours. Limit value 15 min: 246 mg/m ³ 15 minutes. Limit value 15 min: 50 ppm 15 minutes. Limit value 8 hours: 20 ppm 8 hours. |
| ✓Butoxyethanol | Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 1/2021). Absorbed through skin. STELV: 246 mg/m ³ 15 minutes. STELV: 50 ppm 15 minutes. ELV: 98 mg/m ³ 8 hours. ELV: 20 ppm 8 hours. |
| No exposure limit value known. | |
| Z-Butoxyethanol | Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022). Absorbed through skin. TWA: 100 mg/m ³ 8 hours. TWA: 20.4 ppm 8 hours. STEL: 200 mg/m ³ 15 minutes. STEL: 40.8 ppm 15 minutes. |
| ₽-Butoxyethanol | Working Environment Authority (Denmark, 6/2022). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 246 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes. |
| No exposure limit value known. | |
| ₽-Butoxyethanol | EU OEL (Europe, 1/2022). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m ³ 15 minutes. |
| ate of issue/Date of revision : 07/11/202. VILUX 6790-03 - TS 21333 WHITE | 3 Date of previous issue : 09/11/2022 Version : 1.01 6/22 Label No : 677777 |

SECTION 8: Exposure controls/personal protection 2-Butoxyethanol Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 250 mg/m³ 15 minutes. Ministry of Labor (France, 10/2022). Absorbed through skin. 2-Butoxyethanol Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA: 10 ppm 8 hours. TWA: 49 mg/m³ 8 hours. STEL: 246 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes. Hexamethylene diacrylate DFG MAC-values list (Germany, 7/2022). Skin sensitiser. (1-methyl-1,2-ethanediyl)bis[oxy(methyl-DFG MAC-values list (Germany, 7/2022). Skin sensitiser. 2,1-ethanediyl)] diacrylate 2-Butoxyethanol TRGS 900 OEL (Germany, 6/2022). Absorbed through skin. TWA: 49 mg/m³ 8 hours. PEAK: 98 mg/m³ 15 minutes. TWA: 10 ppm 8 hours. PEAK: 20 ppm 15 minutes. DFG MAC-values list (Germany, 7/2022). Absorbed through skin. TWA: 10 ppm 8 hours. PEAK: 20 ppm, 4 times per shift, 15 minutes. TWA: 49 mg/m³ 8 hours. PEAK: 98 mg/m³, 4 times per shift, 15 minutes. No exposure limit value known. No exposure limit value known. 2-Butoxyethanol Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). Absorbed through skin. STEL: 246 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes. TWA: 100 mg/m³ 8 hours. TWA: 20 ppm 8 hours. 2-Butoxyethanol NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV-8hr: 20 ppm 8 hours. OELV-8hr: 98 mg/m³ 8 hours. OELV-15min: 50 ppm 15 minutes. OELV-15min: 246 mg/m³ 15 minutes. Legislative Decree No. 819/2008. Title IX. Protection from 2-Butoxyethanol chemical agents, carcinogens and mutagens (Italy, 6/2020). Absorbed through skin. 8 hours: 20 ppm 8 hours. 8 hours: 98 mg/m³ 8 hours. Short Term: 50 ppm 15 minutes. Short Term: 246 mg/m³ 15 minutes. No exposure limit value known. No exposure limit value known.

EU OEL (Europe, 1/2022). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours. STEL: 50 ppm 15 minutes.

STEL: 246 mg/m³ 15 minutes.

No exposure limit value known.

2-Butoxyethanol

| ✓Butoxyethanol | Ministry of Social Affairs and Employment, Legal limit value (Netherlands, 12/2022). Absorbed through skin. |
|---------------------------------|--|
| | OEL, 8-h TWA: 100 mg/m ³ 8 hours. STEL,15-min: 246 mg/m ³ 15 minutes. OEL, 8-h TWA: 20.4 ppm 8 hours. STEL,15-min: 50 ppm 15 minutes. |
| 2-Butoxyethanol | FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through skin. Notes: indicative limit value TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 8 hours. |
| No exposure limit value known. | , i i i i i i i i i i i i i i i i i i i |
| No exposure limit value known. | |
| No exposure limit value known. | |
| No exposure limit value known. | |
| | |
| No exposure limit value known. | |
| 2-Butoxyethanol | National institute of occupational safety and health (Spain, 4/2022). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 245 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes. |
| No exposure limit value known. | |
| 2-Butoxyethanol | SUVA (Switzerland, 1/2023). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 49 mg/m ³ 8 hours. STEL: 20 ppm 15 minutes. STEL: 98 mg/m ³ 15 minutes. |
| 2-Methoxy-1-methylethyl acetate | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| | through skin. |
| | STEL: 548 mg/m ³ 15 minutes. |
| | TWA: 50 ppm 8 hours. TWA: 274 mg/m ³ 8 hours. |
| | STEL: 100 ppm 15 minutes. |
| 2-Butoxyethanol | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| | through skin. |
| | STEL: 50 ppm 15 minutes. TWA: 25 ppm 8 hours. |
| | STEL: 246 mg/m ³ 15 minutes. |
| | TWA: 123 mg/m ³ 8 hours. |
| 2-ethylhexan-1-ol | EH40/2005 WELs (United Kingdom (UK), 1/2020). |
| | TWA: 5.4 mg/m ³ 8 hours. |
| | TWA: 1 ppm 8 hours. |
| Toluene | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| | through skin. |
| | STEL: 384 mg/m ³ 15 minutes. TWA: 191 mg/m ³ 8 hours. |
| | TWA: 191 flig/fli ⁻ 8 hours. |
| | STEL: 100 ppm 15 minutes. |

Biological exposure indices

| Product/ingredient | name | | Exposure indic | es |
|--------------------------------|--------------|------------------------|----------------|---------------------|
| No exposure indices known. | | | | |
| No exposure indices known. | | | | |
| No exposure indices known. | | | | |
| No exposure indices known. | | | | |
| No exposure indices known. | | | | |
| | | | | |
| | | | | |
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| 2-Butoxyethanol | Government regulation of Czech Republic Limit Values of |
|----------------------------|--|
| | Biological Exposure Tests (Czech Republic, 9/2015) Biological limit values: 0.17 mmol/mmol creatinine, butoxyacetic acid (after hydrolysis) [in urine]. Sampling time: the end of the shift |
| | at the end of the week. Biological limit values: 200 mg/g creatinine, butoxyacetic acid (after hydrolysis) [in urine]. Sampling time: the end of the shift at the end of the week. |
| No exposure indices known. | |
| 2 -Butoxyethanol | DFG BEI-values list (Germany, 7/2022) Notes: danger from percutaneous absorption (see p. 211 and p. 228). BEI: 150 mg/g creatinine, butoxyacetic acid (after hydrolysis) [in urine]. Sampling time: end of exposure or end of shift / for long- term exposures: at the end of the shift after several shifts. TRGS 903 - BEI Values (Germany, 2/2022) BEI: 150 mg/g creatinine, butoxy acetic acid (after hydrolysis) [in urine]. Sampling time: end of exposure or end of shift; for long-term |
| | exposures: at the end of shift after several shifts. |
| No exposure indices known. | |
| No exposure indices known. | |
| No exposure indices known. | |
| 2-Butoxyethanol | NAOSH (Ireland, 1/2011) BMGV: 200 mg/g creatinine, BAA [in urine]. Sampling time: end shift - As soon as possible after exposure ceases. |
| No exposure indices known. | |
| 2-Butoxyethanol | National institute of occupational safety and health (Spain, 4/2022) VLB: 200 mg/g creatinine, butoxyacetic acid [in urine]. Sampling |
| | time: end of shift. |
| No exposure indices known. | |
| 2-Butoxyethanol | SUVA (Switzerland, 1/2023) BEI: 150 mg/g creatinine, 2-butoxy acetic acid (after hydrolisis) [urine]. Sampling time: immediately after exposure or after working hours. In case of long-term exposure: after more than one shift. |
| 2-Butoxyethanol | EH40/2005 BMGVs (United Kingdom (UK), 8/2018) BGV: 240 mmol/mol creatinine, butoxyacetic acid [in urine]. Sampling time: post shift. |

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SECTION 8: Exposure controls/personal protection

procedures

Recommended monitoring : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

| Inhalation Long term DermalInhalation Long term DermalInfe more (General populationSystemic populationOligotriacrylateDNEL DNEL Long term DermalLong term Dermal 2.77 mg/ kg bw/day 2.77 mg/ WorkersSystemic populationOligotriacrylateDNEL DNEL Long term InhalationLong term Dermal 2.77 mg/ kg bw/dayWorkersSystemic populationOligotriacrylateDNEL Long term InhalationLong term DNEL Long term Dermal7.4 mg/m³ UWorkersWorkersSystemic systemic bw/day2-hydroxy-2-methylpropiophenoneDNEL DNEL Long term OralLong term Dermal 0.4 mg/kg bw/dayWorkersSystemic bw/day0.1-methyl-1,2-ethanediyl)bis[oxy (methyl-2,1-ethanediyl)] diacrylateDNEL DNEL Long term DNEL Long term DNEL Long term0.5 mg/m³ UWorkersSystemic population Bw/daySystemic populationPhosphine oxide, phenylbis (2,4,6-trimethylbenzoyl)-DNEL DNEL Long term Dermal Inhalation DNEL Long term DNEL Long term Dermal DNEL Long term Dermal DNEL Long term Dermal DNEL Long term Dermal DNEL Long term Dermal< | Product/ingredient name | Туре | Exposure | Value | Population | Effects |
|--|--|--------|------------------------|------------------------|--------------------|---|
| DNEL (1-methyl-1,2-ethanediyl)bis[oxy (methyl-2,1-ethanediyl)bis[oxy (2,4,6-trimethylbenzoyl)-DNEL (Long term Oral (2,4,6-trimethylbenzoyl)-Long term Oral (2,4,6-trimethylbenzoyl)-General (2,4,6-trimethylbenzoyl)-Systemic (2,4,6-trimethylbenzoyl)-DNEL (2,4,6-trimethylbenzoyl)- (2,4,6-trimethylbenzoyl)-DNEL (Long term Oral (2,4,6-trimethylbenzoyl)-DNEL (Long term Oral (2,4,6-trimethylbenzoyl)-DNEL (Long term Oral (2,4,6-trimethylbenzoyl)-Ceneral (2,4,6-trimethylbenzoyl)-Systemic (2,4,6-trimet | pipropylenglycol diacrylate | DNEL | Long term Dermal | | - | Systemic |
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| Phosphine oxide, phenylbis (2,4,6-trimethylbenzoyl)-Inhalation Long term Inhalation21 mg/m³WorkersSystemicDNELShort term Inhalation21 mg/m³WorkersSystemicDNELShort term Inhalation21 mg/m³WorkersSystemicDNELShort term Dermal DNEL3.3 mg/kgWorkersSystemicDNELLong term Dermal Inhalation3.3 mg/kgWorkersSystemicDNELDNELLong term Dermal Inhalation3.3 mg/kgWorkersSystemicDNELDNELLong term Inhalation5.2 mg/m³General population [Consumers]SystemicDNELLong term Dermal1.5 mg/kgGeneral population [Consumers]SystemicDNELLong term Oral1.5 mg/kgGeneral generalSystemic | | | Long term Dermal | bw/day | | |
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| InhalationInhalation3.3 mg/kgWorkersSystemicDNELDNELShort term Dermal3.3 mg/kgWorkersSystemicDNELDNELLong term5.2 mg/m³GeneralSystemicDNELLong termInhalationI.5 mg/kgGeneralSystemicDNELLong term Dermal1.5 mg/kgGeneralSystemicDNELLong term Dermal1.5 mg/kgGeneralSystemicDNELLong term Oral1.5 mg/kgGeneralSystemic | | | Inhalation | - | | |
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| DNELLong term Inhalation5.2 mg/m³General population [Consumers]SystemicDNELLong term Dermal1.5 mg/kgGeneral population [Consumers]SystemicDNELLong term Oral1.5 mg/kgGeneral general GeneralSystemic | | | | | | |
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| population | | DNEL | Long term Oral | 1.5 mg/kg | | Systemic |
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| ECTION 8: Exposure co | | | | 10 | 1 |
|-------------------------------------|-------|--------------------------|------------------------|-----------------------|-------------|
| | | Chart tarms Oral | 1.67 | [Consumers] | Curata maio |
| | DNEL | Short term Oral | 1.67 ng/kg | General | Systemic |
| | | | bw/day | population General | Curatamia |
| | DNEL | Long term Oral | 1.5 mg/kg bw/day | population | Systemic |
| | DNEL | Long term Dermal | 1.5 mg/kg | General | Systemic |
| | DINEL | Long term Dermai | bw/day | population | Systemic |
| | DNEL | Short term Dermal | 1.67 mg/ | General | Systemic |
| | DINLL | | kg bw/day | population | Systemic |
| | DNEL | Short term | 1.93 mg/m ³ | General | Systemic |
| | DINLL | Inhalation | 1.95 mg/m | population | Systemic |
| | DNEL | Long term | 1.93 mg/m ³ | General | Systemic |
| | | Inhalation | 1.55 mg/m | population | Cystonic |
| | DNEL | Long term Dermal | 3 mg/kg | Workers | Systemic |
| | | | bw/day | | |
| | DNEL | Short term Dermal | 3.33 mg/ | Workers | Systemic |
| | 0.122 | | kg bw/day | T on or o | eyetenne |
| | DNEL | Short term | 7.84 mg/m ³ | Workers | Systemic |
| | | Inhalation | - 0 | | , |
| | DNEL | Long term | 7.84 mg/m ³ | Workers | Systemic |
| | | Inhalation | - 0 | | , |
| Fatty acids, C18-unsatd., dimers, | DNEL | Long term Dermal | 0.33 mg/ | Workers | Systemic |
| polymers with acrylic acid, bispher | ol | Ū | kg bw/day | | - |
| A, epichlorohydrin and nonanoic a | cid | | | | |
| | DNEL | Long term | 1.18 mg/m ³ | Workers | Systemic |
| | | Inhalation | | | |
| 2-Butoxyethanol | DNEL | Long term Oral | 6.3 mg/kg | General | Systemic |
| | | | bw/day | population | |
| | DNEL | Short term Oral | 26.7 mg/ | General | Systemic |
| | | | kg bw/day | population | |
| | DNEL | Long term | 59 mg/m³ | General | Systemic |
| | | Inhalation | | population | |
| | DNEL | Long term | 98 mg/m³ | Workers | Systemic |
| | | Inhalation | 4 47 | 0 | 1 |
| | DNEL | Short term | 147 mg/m ³ | General | Local |
| | | Inhalation | 246 100 - 1003 | population | |
| | DNEL | Short term | 246 mg/m ³ | Workers | Local |
| | DNEL | Inhalation Short term | 426 mg/m ³ | General | Systemia |
| | DINEL | | 420 mg/m | population | Systemic |
| | DNEL | Inhalation Short term | 1091 mg/ | Workers | Systemic |
| | DINEL | Inhalation | m ³ | VVUIKEIS | Systemic |
| | | | | | |

PNECs

No PNECs available

8.2 Exposure controls

| Appropriate engineering controls | If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. |
|----------------------------------|---|
| Individual protection mea | <u>sures</u> |
| Hygiene measures | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. |
| Eye/face protection | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. |

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SECTION 8: Exposure controls/personal protection

| Skin protection | |
|---------------------------------|---|
| Hand protection | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| | Recommendations : Wear suitable gloves tested to EN374. |
| | < 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm |
| | 1 - 4 hours (breakthrough time): $4H$ / Silver Shield® gloves. |
| Body protection | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. |
| | Filter type: A |
| | Filter type (spray application): A P |
| Environmental exposure controls | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

| <u>Appearance</u> | | | | | | |
|--|--|--|--|--|--|--|
| Physical state | : Liquid. | | | | | |
| Colour | : White. | | | | | |
| Odour | : Slight | | | | | |
| Odour threshold | : Not available. | | | | | |
| Melting point/freezing point | : Not available. | | | | | |
| Initial boiling point and boiling range | : Not available. | | | | | |
| Flammability | : Not available. | | | | | |
| Lower and upper explosion limit | : Lower: Not applicable. Upper: Not applicable. | | | | | |
| Flash point | : Closed cup: >100°C (>212°F) | | | | | |
| Auto-ignition temperature | ÷ | | | | | |
| Ingredient name | °C °F | | | | | |
| Hexamethylene diacrylate | 235 455 | | | | | |
| Dipropylenglycol diacrylate | 240 464 | | | | | |
| Decomposition temperature | : Not available. | | | | | |
| рН | : Not applicable. | | | | | |
| Viscosity | : Not available. | | | | | |
| Solubility(ies) | : | | | | | |
| | | | | | | |

Method DIN 51794 DIN 51794

SECTION 9: Physical and chemical properties

ŝ

Solubility in water : Not available.

Partition coefficient: n-octanol/ : Not applicable. water

Vapour pressure

| | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|---------------------------------|-------------------------|------------|----------|-------------------------|-------|----------|
| Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| 4 hydroxy-2-methylpropiophenone | 0.00428 | 0.00057 | OECD 104 | 0.09751 | 0.013 | OECD 104 |
| Dipropylenglycol diacrylate | 0.00064 | 0.000085 | OECD 104 | | | |
| Relative density | : Not a | vailable. | • | | | |
| Density | : 1.2 g | /cm³ | | | | |
| apour density | : Not a | vailable. | | | | |
| xplosive properties | : Not a | vailable. | | | | |
| Dxidising properties | : Not a | vailable. | | | | |
| article characteristics | | | | | | |
| Median particle size | : Not a | pplicable. | | | | |

| SECTION 10: Stabilit | y and reactivity |
|--|--|
| 10.1 Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | : The product is stable. |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : No specific data. |
| 10.5 Incompatible materials | : No specific data. |
| 10.6 Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

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

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|------------------------------|-------------|---------|-------------|----------|
| pipropylenglycol diacrylate | LD50 Oral | Rat | 4600 mg/kg | - |
| Hexamethylene diacrylate | LD50 Oral | Rat | 5 g/kg | - |
| 2-hydroxy- | LD50 Dermal | Rat | 6929 mg/kg | - |
| 2-methylpropiophenone | | | | |
| | LD50 Oral | Rat | 1694 mg/kg | - |
| (1-methyl-1,2-ethanediyl)bis | LD50 Oral | Rat | 6200 mg/kg | - |
| [oxy(methyl-2,1-ethanediyl)] | | | | |
| diacrylate | | | | |
| Phosphine oxide, phenylbis | LD50 Oral | Rat | >2000 mg/kg | - |
| (2,4,6-trimethylbenzoyl)- | | | | |

Conclusion/Summary : Based on available data, the classification criteria are not met.

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Acute toxicity estimates

| Route | ATE value | | |
|----------------------|-----------------|--|--|
| Øral | 108589.74 mg/kg | | |
| Inhalation (vapours) | 1562.5 mg/l | | |

Irritation/Corrosion

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SECTION 11: Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|--|--------------------------|---------|-------|--------------|-------------|
| Dipropylenglycol diacrylate | Eyes - Severe irritant | Rabbit | - | 100 mg | - |
| | Skin - Severe irritant | Rabbit | - | 500 mg | - |
| Hexamethylene diacrylate | Skin - Severe irritant | Rabbit | - | 24 hours 500 | - |
| | | | | mg | |
| titanium dioxide | Skin - Mild irritant | Human | - | 72 hours 300 | - |
| | | | | ug l | |
| (1-methyl-1,2-ethanediyl)bis | Eyes - Severe irritant | Rabbit | - | 24 hours 100 | - |
| [oxy(methyl-2,1-ethanediyl)] diacrylate | | | | uL | |
| - | Skin - Moderate irritant | Rabbit | - | 500 mg | - |
| 2-Butoxyethanol | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 | - |
| | | | | mg | |
| | Eyes - Severe irritant | Rabbit | - | 100 mg | - |
| | Skin - Mild irritant | Rabbit | - | 500 mg | - |

Conclusion/Summary Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|--|-------------------|------------|-------------|
| Phosphine oxide, phenylbis (2,4,6-trimethylbenzoyl)- | skin | Guinea pig | Sensitising |

Conclusion/Summary

: May cause an allergic skin reaction.

Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|--|------|-------------------|----------|
| Phosphine oxide, phenylbis (2,4,6-trimethylbenzoyl)- | - | Subject: Bacteria | Negative |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|------------|-------------------|------------------------------|
| (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes : Not available.

of exposure

Potential acute health effects

| Eye contact | : Causes serious eye damage. | |
|--------------|--|--|
| Inhalation | : No known significant effects or critical hazards. | |
| Skin contact | : Causes skin irritation. May cause an allergic skin reaction. | |
| Ingestion | : No known significant effects or critical hazards. | |

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SECTION 11: Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

| Eye contact | : Adverse symptoms may include the following: pain watering redness |
|--------------|--|
| Inhalation | : No specific data. |
| Skin contact | : Adverse symptoms may include the following: pain or irritation redness blistering may occur |
| Ingestion | : Adverse symptoms may include the following: stomach pains |

| Delayed and immediate effect | ts as well as chronic effects from short and long-term exposure |
|------------------------------|---|
| <u>Short term exposure</u> | |
| Potential immediate effects | : Not available. |
| Potential delayed effects | : Not available. |
| Long term exposure | |
| Potential immediate effects | : Not available. |
| Potential delayed effects | : Not available. |
| Potential chronic health eff | ects |
| Not available. | |
| Conclusion/Summary | : Not available. |
| General | : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Carcinogenicity | : No known significant effects or critical hazards. |
| Mutagenicity | : No known significant effects or critical hazards. |
| Reproductive toxicity | : No known significant effects or critical hazards. |

11.2 Information on other hazards

- **11.2.1 Endocrine disrupting properties** Not available.
- 11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|------------------------------|--|---|---------------------|
| Hexamethylene diacrylate | EC50 1.09 mg/l | Algae - Selenastrum capricornutum | 72 hours |
| | EC50 2.7 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | LC50 0.38 mg/l | Fish - Oryzias latipes | 96 hours |
| | NOEC 0.5 mg/l | Algae - Desmodesmus subspicatus | 72 hours |
| | NOEC 0.14 mg/l | Daphnia - Daphnia magna | |
| | NOEC 0.072 mg/l | Fish - Oryzias latipes | 21 days 96 hours |
| titanium dioxide | Acute LC50 3 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| | Acute LC50 6.5 mg/l Fresh water | Daphnia - <i>Daphnia pulex -</i> Neonate | 48 hours |
| | Acute LC50 >1000000 μg/l Marine water | Fish - Fundulus heteroclitus | 96 hours |
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SECTION 12: Ecological information

| Ŭ | | | |
|----------------------------|--------------------------------------|---------------------------------|----------|
| Phosphine oxide, phenylbis | EC50 ≥0.26 mg/l | Aquatic plants - Desmodesmus | 72 hours |
| (2,4,6-trimethylbenzoyl)- | | subspicatus | |
| | | Daphnia - <i>Daphnia magna</i> | 21 days |
| | | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | | Fish - Brachydanio rerio | 96 hours |
| 2-Butoxyethanol | 0 | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | | 5 5 | 48 hours |
| | Acute LC50 1250000 μg/l Marine water | Fish - <i>Menidia beryllina</i> | 96 hours |

Conclusion/Summary : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

| Conclusion/Summary | : This product has not been tested for biodegradation. | | |
|--|--|------------|------------------|
| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
| Phosphine oxide, phenylbis (2,4,6-trimethylbenzoyl)- | - | - | Not readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------------------|--------------|-----|-----------|
| D ipropylenglycol diacrylate | 0.01 to 0.39 | - | Low |
| Hexamethylene diacrylate | 2.81 | - | Low |
| Oligotriacrylate | 2.52 | - | Low |
| 2-hydroxy- | 1.62 | - | Low |
| 2-methylpropiophenone | | | |
| (1-methyl-1,2-ethanediyl)bis | 2 | - | Low |
| [oxy(methyl-2,1-ethanediyl)] | | | |
| diacrylate | | | |
| Phosphine oxide, phenylbis | 5.77 | <5 | Low |
| (2,4,6-trimethylbenzoyl)- | | | |
| 2-Butoxyethanol | 0.81 | - | 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 available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

| 13.1 Waste treatment meth <u>Product</u> | ods | | | |
|---|--|---|---|--|
| Methods of disposal | Disposal of with the rec any regiona products via | uirements of environments al local authority requirem a a licensed waste dispo- the sewer unless fully c | nd any by-products s ntal protection and w ents. Dispose of su sal contractor. Was | d wherever possible. should at all times comply vaste disposal legislation and urplus and non-recyclable te should not be disposed of quirements of all authorities |
| Hazardous waste | : The classifi | cation of the product ma | y meet the criteria fo | or a hazardous waste. |
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SECTION 13: Disposal considerations

| European waste catalogue (EWC) | : 080111* |
|-----------------------------------|---|
| Packaging | |
| Methods of disposal | The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. |
| Special precautions | This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. |

SECTION 14: Transport information

| | _ | | | |
|------------------------------------|----------------|----------------|----------------|----------------|
| | ADR/RID | ADN | IMDG | IATA |
| 14.1 UN number or ID number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - | - |
| 14.4 Packing group | - | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. | No. |

14.6 Special precautions for : 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 user the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO

: Not relevant/applicable due to nature of the product.

instruments

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 XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

| Product/ingredient name | % | Designation [Usage] |
|-------------------------|-----|---------------------|
| ₩VILUX 6790-03 | ≥90 | 3 |

Labelling

Other EU regulations

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SECTION 15: Regulatory information

| SECTION 15: Regula | atory information | | |
|---|--|---|--|
| Industrial emissions (integrated pollution prevention and control) - Air | : Not listed | | |
| Industrial emissions (integrated pollution prevention and control) - Water | : Not listed | | |
| Explosive precursors | : Not applicable. | | |
| Ozone depleting substand | ces (1005/2009/EU) | | |
| Not listed. | | | |
| Prior Informed Consent (F Not listed. | <u>PIC) (649/2012/EU)</u> | | |
| Persistent Organic Polluta Not listed. | <u>ants</u> | | |
| Seveso Directive | | | |
| This product is not controlle | d under the Seveso Directive. | | |
| National regulations | | | |
| <u>Austria</u> | | | |
| VbF class | : Not regulated. | | |
| Limitation of the use of | : Permitted. | | |
| organic solvents | | | |
| Czech Republic | | | |
| Storage code | : 🕅 | | |
| <u>Denmark</u> | | | |
| Danish fire class | : IV-1 | | |
| Executive Order No. 1795 | / <u>2015</u> | | |
| Ingredient name | | Annex I Section A | Annex I Section B |
| titanium dioxide | | Listed | - |
| MAL-code | : 00-5 | | |
| Protection based on MAL | : According to the regulations stipulations apply to the use | | |
| | General: Gloves must be worn coveralls/protective clothing mu clothes do not adequately prote shield must be worn in work inv case, other recommended use | st be worn when soiling is so ct skin against contact with th olving spattering if a full mask | great that regular work e product. A face is not required. In this |
| | In all spraying operations in whi respiratory protection and arm pappropriate or as instructed. | | |
| | MAL-code: 00-5 Application: When using scra treatments in a spray booth whe working in similar new* facilities type where the operator is work booths and cabins with non-ato in closed facilities, spray booths or organic solvents. During nor | ere the operator is outside the of the combined-cabin, spray ing inside the spray zone. Wh mizing guns. During downtim or cabins, if there is a risk of | spray zone and when -cabin and spray-booth len spraying in new* es, cleaning and repair contact with wet paint g* facilities of the |

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SECTION 15: Regulatory information

| SECTION 15: Regulat | 0 | ry information |
|--|---|---|
| | | inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin. |
| | | - Protective clothing must be worn. |
| | | When spraying in existing* spray booths, if the operator is outside the spray zone. |
| | | - Air-supplied full mask and protective clothing must be worn. |
| | | During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth. |
| | | - Air-supplied full mask, protective clothing and hood must be worn. |
| | | Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone. |
| | | Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn. |
| | | Caution The regulations contain other stipulations in addition to the above. |
| | | *See Regulations. |
| Restrictions on use | : | Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work. |
| List of undesirable substances | : | Not listed |
| Carcinogenic waste | : | Waste containers must be labeled: Contains a substance or substances regulated by Danish working environment legislation on cancer risks. |
| <u>Finland</u> France | | |
| Social Security Code, Articles L 461-1 to L 461-7 | : | M-methyl-1,2-ethanediyl)bis[oxy(methyl- RG 84 2,1-ethanediyl)] diacrylate 2-Butoxyethanol RG 84 |
| Reinforced medical surveillance | : | Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable |
| <u>Germany</u> | | |
| Storage class (TRGS 510) | | 10 |
| Hazardous incident ordinar | | - |
| • | | nder the Germany Hazardous Incident Ordinance. |
| Hazard class for water Technical instruction on | | 2 TA-Luft Number 5.2.5: 69% |
| air quality control | | TA-Luit Number 5.2.5. 09% |
| D.Lgs. 152/06 | ÷ | Not determined. |
| <u>Netherlands</u> | 1 | |
| Water Discharge Policy (ABM) | : | A(2) Toxic for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A |
| <u>Norway</u> | | |
| <u>Sweden</u> | | |
| <u>Switzerland</u> | | |
| VOC content | ÷ | Exempt. |
| International regulations | | |
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SECTION 15: Regulatory information

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

| 1 | 5.2 | Che | emi | ical | safety | |
|---|-----|-----|-----|------|--------|--|
| а | SSA | ssn | ner | nt | | |

: 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 N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group |
|----------------------------|--|
| | SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative |

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

| Classification | Justification |
|-------------------------|--------------------|
| Skin Irrit. 2, H315 | Calculation method |
| Eye Dam. 1, H318 | Calculation method |
| Skin Sens. 1, H317 | Calculation method |
| Aquatic Chronic 3, H412 | Calculation method |

Full text of abbreviated H statements

| J 302 | Harmful if swallowed. | |
|--------------|---|--|
| H315 | Causes skin irritation. | |
| H317 | May cause an allergic skin reaction. | |
| H318 | Causes serious eye damage. | |
| H319 | Causes serious eye irritation. | |
| H331 | Toxic if inhaled. | |
| H335 | May cause respiratory irritation. | |
| H351 | Suspected of causing cancer. | |
| H400 | Very toxic to aquatic life. | |
| H411 | Toxic to aquatic life with long lasting effects. | |
| H412 | Harmful to aquatic life with long lasting effects. | |
| H413 | May cause long lasting harmful effects to aquatic life. | |

Full text of classifications [CLP/GHS]

SECTION 16: Other information

| Acute Tox. 3 | ACUTE TOXICITY - Category 3 |
|------------------------|---|
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Acute 1 | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Aquatic Chronic 4 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4 |
| Carc. 2 | CARCINOGENICITY - Category 2 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| Skin Sens. 1A | SKIN SENSITISATION - Category 1A |
| Skin Sens. 1B | SKIN SENSITISATION - Category 1B |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |
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| revision | |
| Date of previous issue | e : 09/11/2022 |
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| | |

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

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