# Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

## SECTION 1. Identification of the substance/mixture and of the company/undertaking

**1.1. Product identifier**

Product name **PLT 47 WHITE: BIANCHI, 160, 160 HD,**

UFI : **4RC3-E0HE-200T-P5Y2**

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

Intended use **Pad printing ink**

**1.3. Details of the supplier of the safety data sheet**

Name **COMEC ITALIA SRL**
Full address **Piazzale del lavoro 149**
District and Country **21044 Cavaria (VA)**
**ITALIA**

**Tel. +39 0331 219516**

**Fax +39 0331 216161**

e-mail address of the competent person

responsible for the Safety Data Sheet **info@comec-italia.it**
Supplier: **Edgardo Baggini**

**1.4. Emergency telephone number**

For urgent inquiries refer to **Centro Antiveleni di Milano 02 66101029**
**(Niguarda Ca Granda - Milano)**
**Centro Antiveleni di Pavia 0382 24444**
**(Fondazione Maugeri - Pavia)**
**Centro Antiveleni di Bergamo 800 883300**
**(Papa Giovanni XXIII - Bergamo)**
**Centro Antiveleni di Verona 800 011858**
**(AOUI - Verona)**
**Centro Antiveleni di Firenze 055 7947819**
**(Careggi - Firenze)**
**Centro Antiveleni di Roma 06 3054343**
**(Agostino Gemelli - Roma)**
**Centro Antiveleni di Roma 06 49978000**
**(Umberto I - Roma)**
**Centro Antiveleni di Roma 06 68593726**
**(Ospedale pediatrico Bambino Gesu - Roma)**
**Centro Antiveleni di Napoli 081 5453333**
**(Antonio Cardarelli - Napoli)**
**Centro Antiveleni di Foggia 800 183459**
**(Azienda ospedaliera universitaria - Foggia)**

## SECTION 2. Hazards identification

**2.1. Classification of the substance or mixture**

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

| | | |
|---|---|---|
| Flammable liquid, category 3 | H226 | Flammable liquid and vapour. |
| Aspiration hazard, category 1 | H304 | May be fatal if swallowed and enters airways. |
| Specific target organ toxicity - repeated exposure, category 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Serious eye damage, category 1 | H318 | Causes serious eye damage. |
| Skin irritation, category 2 | H315 | Causes skin irritation. |
| Hazardous to the aquatic environment, chronic toxicity, category 3 | H412 | Harmful to aquatic life with long lasting effects. |

**2.2. Label elements**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Danger

Hazard statements:

| | |
|---|---|
| **H226** | Flammable liquid and vapour. |
| **H304** | May be fatal if swallowed and enters airways. |
| **H373** | May cause damage to organs through prolonged or repeated exposure. |
| **H318** | Causes serious eye damage. |
| **H315** | Causes skin irritation. |
| **H412** | Harmful to aquatic life with long lasting effects. |
| **EUH208** | Contains: Essential oil sweet orange<br>May produce an allergic reaction. |

Precautionary statements:

| | |
|---|---|
| **P210** | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| **P331** | Do NOT induce vomiting. |
| **P305+P351+P338** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| **P280** | Wear protective gloves/ protective clothing / eye protection / face protection. |
| **P310** | Immediately call a POISON CENTER or a doctor. |
| **P370+P378** | In case of fire: use chemical powder, CO2 or dry send to extinguish. |

| | |
|---|---|
| **Contains:** | XYLENE (MIXTURE OF ISOMERS)<br>BUTANOL<br>ETHYLBENZENE<br>CYCLOHEXANONE |

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

## SECTION 3. Composition/information on ingredients

**3.2. Mixtures**

Contains:

| Identification | x = Conc. % | Classification (EC) 1272/2008 (CLP) |
|---|---|---|
| **TITANIUM DIOXIDE** | | |
| INDEX - | 40 ≤ x < 42,5 | |
| EC 236-675-5 | | |
| CAS 13463-67-7 | | |
| **XYLENE (MIXTURE OF ISOMERS)** | | |
| INDEX 601-022-00-9 | 10,5 ≤ x < 12 | Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note according to Annex VI to the CLP Regulation: C |
| EC 215-535-7 | | STA Dermal: 1100 mg/kg, LC50 Inhalation vapours: 11,58 mg/l/4h |
| CAS 1330-20-7 | | |
| REACH Reg. 01-2119488216-32-xxxx | | |
| **BUTANOL** | | |
| INDEX 603-004-00-6 | 3,5 ≤ x < 4 | Flam. Liq. 3 H226, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336 |
| EC 200-751-6 | | STA Oral: 500 mg/kg |
| CAS 71-36-3 | | |
| REACH Reg. 01-2119484630-38 | | |
| **ETHYLBENZENE** | | |
| INDEX 601-023-00-4 | 2,5 ≤ x < 3 | Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373 |
| EC 202-849-4 | | LC50 Inhalation vapours: 17,2 mg/l/4h |
| CAS 100-41-4 | | |
| REACH Reg. 01-2119489370-35-xxxx | | |
| **Hydrocarbons, C10, aromatics, <1% naphtalene** | | |
| INDEX - | 2 ≤ x < 2,5 | Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066 |
| EC 918-811-1 | | |
| CAS - | | |
| REACH Reg. 01-2119463583-34-xxxx | | |
| **CYCLOHEXANONE** | | |
| INDEX 606-010-00-7 | 2 ≤ x < 2,5 | Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335 |
| EC 203-631-1 | | LD50 Oral: 1535 mg/kg, LD50 Dermal: 1100 mg/kg, LC50 Inhalation vapours: 11 mg/l/4h |
| CAS 108-94-1 | | |
| REACH Reg. 01-2119453616-35-xxxx | | |

| | | |
|---|---|---|
| **2-ETHOSSI-1-METHYL ETHYL ACETATE** | | |
| INDEX 603-177-00-8 | 2 ≤ x < 2,5 | Flam. Liq. 3 H226, STOT SE 3 H336 |
| EC 259-370-9 | | |
| CAS 54839-24-6 | | |
| REACH Reg. 01-2119475116-39xxxx | | |
| **Essential oil sweet orange** | | |
| INDEX | 0,09 ≤ x < 0,11 | Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 1 H410 M=1 |
| EC - | | |
| CAS 8008-57-9 | | |

The full wording of hazard (H) phrases is given in section 16 of the sheet.

## SECTION 4. First aid measures

**4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

**4.3. Indication of any immediate medical attention and special treatment needed**

Information not available

## SECTION 5. Firefighting measures

**5.1. Extinguishing media**

SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

**5.2. Special hazards arising from the substance or mixture**

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

**5.3. Advice for firefighters**

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for

extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

**6.2. Environmental precautions**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

**6.3. Methods and material for containment and cleaning up**

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

**7.1. Precautions for safe handling**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

**7.2. Conditions for safe storage, including any incompatibilities**

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

**7.3. Specific end use(s)**

Information not available

## SECTION 8. Exposure controls/personal protection

**8.1. Control parameters**

Regulatory References:

| | | |
|---|---|---|
| BGR | България | НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.) |
| CZE | Česká Republika | Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů |
| DEU | Deutschland | Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56 |
| DNK | Danmark | Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019 |
| ESP | España | Límites de exposición profesional para agentes químicos en España 2021 |
| FRA | France | Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS |
| ITA | Italia | Decreto Legislativo 9 Aprile 2008, n.81 |
| NLD | Nederland | Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit |
| PRT | Portugal | Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos |
| POL | Polska | Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy |
| ROU | România | Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum şi pentru modificarea şi completarea hotărârii guvernului nr. 1.093/2006 |
| SWE | Sverige | Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1) |
| TUR | Türkiye | Kimyasal Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik 12.08.2013 / 28733 |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| EU | OEL EU | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |
| | TLV-ACGIH | ACGIH 2021 |

**TITANIUM DIOXIDE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV | BGR | 10 | | | | RESP |
| TLV | DNK | 6 | | | | Som Ti |
| VLA | ESP | 10 | | | | |
| VLEP | FRA | 10 | | | | |
| NDS/NDSCh | POL | 10 | | | | INHAL |
| TLV | ROU | 10 | | 15 | | |
| NGV/KGV | SWE | 5 | | | | Totaldamm |
| WEL | GBR | 10 | | | | INHAL |
| WEL | GBR | 4 | | | | RESP |
| TLV-ACGIH | | 2,5 | | | | RESP |

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 0,127 | mg/l |
| Normal value in marine water | 1 | mg/l |
| Normal value for fresh water sediment | 1000 | mg/kg |
| Normal value for marine water sediment | 100 | mg/kg |
| Normal value for water, intermittent release | 0,61 | mg/l |
| Normal value of STP microorganisms | 100 | mg/l |
| Normal value for the terrestrial compartment | 100 | mg/kg |

**Health - Derived no-effect level - DNEL / DMEL**

| | Effects on consumers | | | | Effects on workers | | | |
|---|---|---|---|---|---|---|---|---|
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | 700 mg/m3 | | | | |
| Inhalation | | | | | | | | 10 mg/m3 |

**XYLENE (MIXTURE OF ISOMERS)**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations | |
|---|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | | |
| TLV | BGR | 221 | 50 | 442 | 100 | SKIN | |
| TLV | CZE | 200 | 45,4 | 400 | 90,8 | SKIN | |
| AGW | DEU | 440 | 100 | 880 | 200 | SKIN | |
| MAK | DEU | 440 | 100 | 880 | 200 | SKIN | |
| TLV | DNK | 109 | 25 | | | SKIN | E |
| VLA | ESP | 221 | 50 | 442 | 100 | SKIN | |
| VLEP | FRA | 221 | 50 | 442 | 100 | SKIN | |
| VLEP | ITA | 221 | 50 | 442 | 100 | SKIN | |
| TGG | NLD | 210 | | 442 | | SKIN | |
| VLE | PRT | 221 | 50 | 442 | 100 | SKIN | |
| NDS/NDSCh | POL | 100 | | 200 | | SKIN | |
| TLV | ROU | 221 | 50 | 442 | 100 | SKIN | |
| NGV/KGV | SWE | 221 | 50 | 442 | 100 | SKIN | |
| ESD | TUR | 221 | 50 | 442 | 100 | SKIN | |
| WEL | GBR | 220 | 50 | 441 | 100 | SKIN | |
| OEL | EU | 221 | 50 | 442 | 100 | SKIN | |
| TLV-ACGIH | | | 20 | | | | |

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 0,327 | mg/l |
| Normal value in marine water | 0,327 | mg/l |
| Normal value for fresh water sediment | 12,46 | mg/kg |
| Normal value for marine water sediment | 12,46 | mg/kg |
| Normal value for water, intermittent release | 0,327 | mg/l |
| Normal value of STP microorganisms | 6,58 | mg/l |
| Normal value for the terrestrial compartment | 2,31 | mg/kg |

**Health - Derived no-effect level - DNEL / DMEL**

| | Effects on consumers | | | | Effects on workers | | | |
|---|---|---|---|---|---|---|---|---|
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | VND | 1,6 mg/kg/d | | | | |
| Inhalation | 174 mg/m3 | 174 mg/m3 | VND | 14,8 mg/m3 | 289 mg/m3 | 289 mg/m3 | 77 mg/m3 | 77 mg/m3 |
| Skin | | | VND | 108 mg/kg/d | 174 mg/m3 | VND | VND | 180 mg/kg |

**BUTANOL**

**Threshold Limit Value**

| Type | Country | TWA/8h | STEL/15min | Remarks / Observations |
|---|---|---|---|---|

| | | mg/m3 | ppm | mg/m3 | ppm | | | |
|---|---|---|---|---|---|---|---|---|
| TLV | BGR | 100 | | 150 | | | | |
| TLV | CZE | 300 | 97,5 | 600 | 195 | | | |
| AGW | DEU | 310 | 100 | 310 | 100 | | | |
| MAK | DEU | 310 | 100 | 310 | 100 | | | |
| TLV | DNK | | | 150 (C) | 50 (C) | SKIN | | |
| VLA | ESP | 61 | 20 | 154 | 50 | | | |
| VLEP | FRA | | | 150 | 50 | | | |
| TGG | NLD | | | 45 | | | | |
| NDS/NDSCh | POL | 50 | | 150 | | SKIN | | |
| TLV | ROU | 100 | 33 | 200 | 66 | | | |
| NGV/KGV | SWE | 45 | 15 | 90 | 30 | SKIN | | |
| WEL | GBR | | | 154 | 50 | SKIN | | |
| TLV-ACGIH | | 61 | 20 | | | | | |

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 0,082 | mg/l |
| Normal value in marine water | 0,0082 | mg/l |
| Normal value for fresh water sediment | 0,178 | mg/kg |
| Normal value for marine water sediment | 0,0178 | mg/kg |
| Normal value for water, intermittent release | 2,25 | mg/l |
| Normal value of STP microorganisms | 2476 | mg/l |
| Normal value for the terrestrial compartment | 0,015 | mg/kg |

**Health - Derived no-effect level - DNEL / DMEL**

| | Effects on consumers | | | | Effects on workers | | | |
|---|---|---|---|---|---|---|---|---|
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | VND | 3125 mg/kg | | | | |
| Inhalation | | | 55 mg/m3 | VND | | | 310 mg/m3 | VND |

**ETHYLBENZENE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations | |
|---|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | | |
| TLV | BGR | 435 | | 545 | | SKIN | |
| TLV | CZE | 200 | 45,4 | 500 | 113,5 | SKIN | |
| AGW | DEU | 88 | 20 | 176 | 40 | SKIN | |
| MAK | DEU | 88 | 20 | 176 | 40 | SKIN | |
| TLV | DNK | 217 | 50 | | | SKIN | E |
| VLA | ESP | 441 | 100 | 884 | 200 | SKIN | |
| VLEP | FRA | 88,4 | 20 | 442 | 100 | SKIN | |
| VLEP | ITA | 442 | 100 | 884 | 200 | SKIN | |
| TGG | NLD | 215 | | 430 | | SKIN | |
| VLE | PRT | 442 | 100 | 884 | 200 | SKIN | |
| NDS/NDSCh | POL | 200 | | 400 | | SKIN | |

| | | | | | | |
|---|---|---|---|---|---|---|
| TLV | ROU | 442 | 100 | 884 | 200 | SKIN |
| NGV/KGV | SWE | 220 | 50 | 884 | 200 | SKIN |
| ESD | TUR | 442 | 100 | 884 | 200 | SKIN |
| WEL | GBR | 441 | 100 | 552 | 125 | SKIN |
| OEL | EU | 442 | 100 | 884 | 200 | SKIN |
| TLV-ACGIH | | 87 | 20 | | | |

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 0,1 | mg/l ECHA 2018 |
| Normal value in marine water | 0,01 | mg/l ECHA 2018 |
| Normal value for fresh water sediment | 13,7 | mg/kg ECHA 2018 |
| Normal value for marine water sediment | 1,37 | mg/kg ECHA 2018 |
| Normal value for water, intermittent release | 0,1 | mg/l ECHA 2018 |
| Normal value of STP microorganisms | 9,6 | mg/l ECHA 2018 |
| Normal value for the food chain (secondary poisoning) | 20 | mg/kg ECHA 2018 |
| Normal value for the terrestrial compartment | 2,68 | mg/kg ECHA 2018 |

**Hydrocarbons, C10, aromatics, <1% naphtalene**

**Health - Derived no-effect level - DNEL / DMEL**

| | Effects on consumers | | | | Effects on workers | | | |
|---|---|---|---|---|---|---|---|---|
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | VND | 7,5 mg/kg/d | | | | |
| Inhalation | | | VND | 32 mg/m3 | | | VND | 151 mg/m3 |
| Skin | | | VND | 7,5 mg/kg/d | | | VND | 12,5 mg/kg/d |

**2-ETHOSSI-1-METHYL ETHYL ACETATE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations | |
|---|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | | |
| AGW | DEU | 120 | 20 | 240 | 40 | SKIN | 14 |
| MAK | DEU | 120 | 20 | 240 | 40 | SKIN | Hinweis |

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 2 | mg/l |
| Normal value in marine water | 0,8 | mg/l |
| Normal value for fresh water sediment | 8,2 | mg/kg |
| Normal value for marine water sediment | 0,6 | mg/kg |
| Normal value for water, intermittent release | 2 | mg/l |
| Normal value of STP microorganisms | 62,5 | mg/kg |
| Normal value for the food chain (secondary poisoning) | 117 | mg/kg |
| Normal value for the terrestrial compartment | 0,6 | mg/kg |

**Health - Derived no-effect level - DNEL / DMEL**

| | Effects on consumers | | | | Effects on workers | | | |
|---|---|---|---|---|---|---|---|---|
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | VND | 13,1 mg/kg | | | | |
| Inhalation | VND | 365 mg/m3 | VND | 181 mg/m3 | VND | 608 mg/m3 | VND | 302 mg/m3 |
| Skin | | | VND | 62 mg/kg | | | VND | 103 mg/kg |

**CYCLOHEXANONE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV | BGR | 40,8 | 10 | 81,6 | 20 | SKIN |
| TLV | CZE | 40 | 9,8 | 80 | 196 | SKIN |
| AGW | DEU | 80 | 20 | 80 | 20 | SKIN |
| TLV | DNK | 41 | 10 | | | SKIN E |
| VLA | ESP | 41 | 10 | 82 | 20 | SKIN |
| VLEP | FRA | 40,8 | 10 | 81,6 | 20 | |
| VLEP | ITA | 40,8 | 10 | 81,6 | 20 | SKIN |
| TGG | NLD | | | 50 | | SKIN |
| VLE | PRT | 40,8 | 10 | 81,6 | 20 | SKIN |
| NDS/NDSCh | POL | 40 | | 80 | | SKIN |
| TLV | ROU | 40,8 | 10 | 81,6 | 20 | SKIN |
| NGV/KGV | SWE | 41 | 10 | 81 | 20 | SKIN |
| ESD | TUR | 40,8 | 10 | 81,6 | 20 | SKIN |
| WEL | GBR | 41 | 10 | 82 | 20 | SKIN |
| OEL | EU | 40,8 | 10 | 81,6 | 20 | SKIN |
| TLV-ACGIH | | 80 | 20 | 201 | 50 | SKIN |

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 0,1 | mg/l |
| Normal value in marine water | 0,01 | mg/l |
| Normal value for fresh water sediment | 0,512 | mg/kg |
| Normal value for marine water sediment | 0,0512 | mg/kg |
| Normal value for water, intermittent release | 0,329 | mg/l |
| Normal value of STP microorganisms | 10 | mg/l |
| Normal value for the terrestrial compartment | 0,0435 | mg/kg |

**Health - Derived no-effect level - DNEL / DMEL**

| | Effects on consumers | | | | Effects on workers | | | |
|---|---|---|---|---|---|---|---|---|
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | 1,5 mg/kg bw/d | | | | |
| Inhalation | | | VND | 10 mg/m3 | | | VND | 40 mg/m3 |
| Skin | | | VND | 1 mg/kg bw/d | | | VND | 4 mg/kg bw/d |

**Modified amorphous silicon**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| VLEP | ITA | 3 | | | | INHAL |
| VLEP | ITA | 10 | | | | RESP |

**HYDROM HYDROPHONE SILICATE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 4 | | | | INHAL |
| MAK | DEU | 4 | | | | INHAL |

**Traduci da: Indonesiano**

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 0,0032 | mg/l |
| Normal value in marine water | 0,0032 | mg/l |
| Normal value for fresh water sediment | 15,6 | mg/kg |
| Normal value for water, intermittent release | 0,0032 | mg/l |
| Normal value of STP microorganisms | 35 | mg/l |
| Normal value for the terrestrial compartment | 0,865 | mg/kg/d |

**Health - Derived no-effect level - DNEL / DMEL**

| | Effects on consumers | | | | Effects on workers | | | |
|---|---|---|---|---|---|---|---|---|
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | 1,3 mg/kg bw/d | | | | | | |
| Inhalation | | | | 4,4 mg/m3 | | | | 17,8 mg/m3 |
| Skin | | | | 13 mg/kg bw/d | | | | 25,5 mg/kg bw/d |

**MALEIC ANHYDRIDE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV | BGR | 1 | | | | |
| TLV | CZE | 1 | 0,245 | 2 | 0,49 | |
| AGW | DEU | 0,081 | 0,02 | 0,081 (C) | 0,02 (C) | |
| MAK | DEU | 0,081 | 0,02 | 0,081 (C) | 0,02 (C) | C = 0,20 mg/m3 |
| TLV | DNK | 0,4 | 0,1 | | | |
| VLA | ESP | 0,4 | 0,1 | | | |
| VLEP | FRA | | | 1 | | |
| NDS/NDSCh | POL | 0,5 | | 1 | | SKIN |
| TLV | ROU | 1 | 0,25 | 3 | 0,75 | |
| NGV/KGV | SWE | 0,2 | 0,05 | 0,4 | 0,1 | |
| WEL | GBR | 1 | | 3 | | |
| TLV-ACGIH | | 0,01 | 0,0025 | | | INHAL |

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| Properties | Value | Information |
|---|---|---|
| Appearance | liquid | |
| Colour | white | |
| Odour | typical of solvent | |
| Melting point / freezing point | not available | |
| Initial boiling point | > 140 °C | |
| Flammability | not available | |

| | |
|---|---|
| Lower explosive limit | not available |
| Upper explosive limit | not available |
| Flash point | > 26 °C |
| Auto-ignition temperature | not available |
| Decomposition temperature | not available |
| pH | not available |
| Kinematic viscosity | not available |
| Solubility | insoluble in water |
| Partition coefficient: n-octanol/water | not available |
| Vapour pressure | not available |
| Density and/or relative density | not available |
| Relative vapour density | not available |
| Particle characteristics | not applicable |

**9.2. Other information**

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

## SECTION 10. Stability and reactivity

**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

DPnB

Do not put in contact with free oxygen

BUTANOL

Attacks various types of plastic materials.

CYCLOHEXANONE

Attacks various types of plastic materials.

May condense under the effect of heat to form resinous compounds.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

DPnB

Stable product under recommended storage and use conditions

**10.3. Possibility of hazardous reactions**

The vapours may also form explosive mixtures with the air.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage.Reacts violently with: strong oxidants,strong acids,nitric acid,perchlorates.May form explosive mixtures with: air.

DPnB

Avoid oxygen infiltration

BUTANOL

Reacts violently developing heat on contact with: aluminium,strong oxidising agents,strong reducing agents,hydrochloric acid.Forms explosive mixtures with: air.

ETHYLBENZENE

Reacts violently with: strong oxidants.Attacks various types of plastic materials.May form explosive mixtures with: air.

CYCLOHEXANONE

Risk of explosion on contact with: hydrogen peroxide,nitric acid,heat,mineral acids.May react violently with: oxidising agents.Forms explosive mixtures with: air.

**10.4. Conditions to avoid**

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

DPnB

Avoid oxygen infiltration; avoid heat, flames, sparks

BUTANOL

Avoid exposure to: sources of heat,naked flames.

CYCLOHEXANONE

Avoid exposure to: sources of heat,naked flames.

**10.5. Incompatible materials**

DPnB

Avoid oxygen infiltration

**10.6. Hazardous decomposition products**

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

DPnB

In the event of a fire, it can release carbon monoxide

ETHYLBENZENE

May develop: methane,styrene,hydrogen,ethane.

## SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Hydrocarbons, C10, aromatics, <1% naphtalene
Specific target organ toxicity (STOT) - single exposure:
NOAEC> 600 mg / kg Inhalation. Rat

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

XYLENE (MIXTURE OF ISOMERS)
WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

ETHYLBENZENE
WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

XYLENE (MIXTURE OF ISOMERS)
Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

ETHYLBENZENE
As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispesl). Is irritating for skin, conjunctiva and respiratory tract.

Interactive effects

XYLENE (MIXTURE OF ISOMERS)
Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

| | |
| --- | --- |
| ATE (Inhalation - vapours) of the mixture: | > 20 mg/l |
| ATE (Oral) of the mixture: | >2000 mg/kg |
| ATE (Dermal) of the mixture: | >2000 mg/kg |

TITANIUM DIOXIDE

| | |
| --- | --- |
| LD50 (Oral): | > 5000 mg/l Ratto/Rat |
| LC50 (Inhalation mists/powders): | > 6,82 mg/l Ratto/Rat |

XYLENE (MIXTURE OF ISOMERS)

| | |
| --- | --- |
| LD50 (Dermal): | 4350 mg/kg Rabbit |
| STA (Dermal): | 1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP<br>(figure used for calculation of the acute toxicity estimate of the mixture) |
| LD50 (Oral): | 3523 mg/kg Rat |
| LC50 (Inhalation vapours): | 11,58 mg/l/4h Rat |

DPnB

| | |
| --- | --- |
| LD50 (Dermal): | 5330 mg/kg Coniglio - Rabbit |
| LD50 (Oral): | 3700 mg/kg Ratto - Rat |

BUTANOL

| | |
| --- | --- |
| LD50 (Dermal): | 3400 mg/kg Rabbit |
| LD50 (Oral): | 2290 mg/kg Rat |
| STA (Oral): | 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP<br>(figure used for calculation of the acute toxicity estimate of the mixture) |
| LC50 (Inhalation vapours): | 17,76 mg/l/4h Rat |

ETHYLBENZENE

| | |
|---|---|
| LD50 (Dermal): | 15354 mg/kg Rabbit |
| LD50 (Oral): | 3500 mg/kg Rat |
| LC50 (Inhalation vapours): | 17,2 mg/l/4h Rat |

Hydrocarbons, C10, aromatics, <1% naphtalene

| | |
|---|---|
| LD50 (Dermal): | > 2000 mg/kg Coniglio / Rabbit |
| LD50 (Oral): | 6318 mg/kg Ratto / Rat |
| LC50 (Inhalation vapours): | > 4688 mg/kg/4h Ratto / Rat |

2-ETHOSSI-1-METHYL ETHYL ACETATE

| | |
|---|---|
| LD50 (Dermal): | 13,42 ml/Kg Coniglio / Rabbit |
| LD50 (Oral): | > 5000 mg/kg Ratto / Rat |
| LC50 (Inhalation vapours): | 6,99 mg/l/4h Rat |

CYCLOHEXANONE

| | |
|---|---|
| LD50 (Dermal): | 1100 mg/kg 794 - 3160 / Coniglio / Rabbit |
| LD50 (Oral): | 1535 mg/kg Ratto / Rat |
| LC50 (Inhalation vapours): | 11 mg/l/4h Ratto / Rat (4h) |

Modified amorphous silicon

| | |
|---|---|
| LD50 (Oral): | > 5000 mg/kg Ratto / Rat |

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.
Contains:
Essential oil sweet orange

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

XYLENE (MIXTURE OF ISOMERS)
Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

ETHYLBENZENE
Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).
Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Toxic for aspiration

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

## SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.
**12.1. Toxicity**

| DPnB | |
|---|---|
| LC50 - for Fish | 841 mg/l/96h poecilia reticulata |
| EC50 - for Crustacea | > 1000 mg/l/48h Daphnia magna |

Hydrocarbons, C10, aromatics, <1% naphtalene

| | |
|---|---|
| LC50 - for Fish | > 2 mg/l/96h |
| EC50 - for Crustacea | > 3 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | > 1 mg/l/72h |

TITANIUM DIOXIDE

| | |
|---|---|
| LC50 - for Fish | > 10000 mg/l/96h Cypridonon variegatus |

2-ETHOSSI-1-METHYL ETHYL ACETATE

| | |
|---|---|
| LC50 - for Fish | 140 mg/l/48h Oncorhynchus mykiss (test 48h) |
| EC50 - for Crustacea | 110 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | > 100 mg/l/72h Scenedesmus subspicatus |

ETHYLBENZENE

| | |
|---|---|
| LC50 - for Fish | 4,2 mg/l/96h Oncorhynchus mykiss OECD TG 203 |
| EC50 - for Crustacea | 2,4 mg/l/48h Daphnia magna (database Ecotox) |
| EC50 - for Algae / Aquatic Plants | 3,6 mg/l/72h Pseudokirchneriella subcapitata (IUCLID) |

BUTANOL

| | |
|---|---|
| LC50 - for Fish | 1376 mg/l/96h Pimephales promelas |
| EC50 - for Crustacea | 1328 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | 225 mg/l/96h 96h - Selenastrum capricornutum |

CYCLOHEXANONE

| | |
|---|---|
| LC50 - for Fish | 527 mg/l/96h 527 - 732 / Pimephales promelas |
| EC50 - for Crustacea | > 100 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | > 100 mg/l/72h Scenedesmus subspicatus |

Modified amorphous silicon

| | |
|---|---|
| LC50 - for Fish | > 10000 mg/l/96h Brachydanio rerio OECD 203 |
| EC50 - for Crustacea | > 10000 mg/l/24h Daphnia Magna OCSE 202 - 24 h |

**12.2. Persistence and degradability**

DPnB

Entirely degradable

Hydrocarbons, C10, aromatics, <1% naphtalene

| | |
|---|---|
| Solubility in water | immiscibile in H2O mg/l |

Rapidly degradable

XYLENE (MIXTURE OF ISOMERS)

| | |
|---|---|
| Solubility in water | 100 - 1000 mg/l |

Rapidly degradable

2-ETHOSSI-1-METHYL ETHYL ACETATE

| | |
|---|---|
| Solubility in water | > 10000 mg/l |

Rapidly degradable

Activated sludge - 89%/15 d - 100%/28 d
ETHYLBENZENE

| | |
|---|---|
| Solubility in water | 200 mg/l ECHA 2018/05/18 |

Rapidly degradable
BUTANOL

| | |
|---|---|
| Solubility in water | 78 mg/l |

Rapidly degradable
CYCLOHEXANONE

| | |
|---|---|
| Solubility in water | 86 mg/l |

Rapidly degradable
Modified amorphous silicon

| | |
|---|---|
| Solubility in water | > 1 mg/l |

**12.3. Bioaccumulative potential**

DPnB

| | |
|---|---|
| Partition coefficient: n-octanol/water | 1,523 |

XYLENE (MIXTURE OF ISOMERS)

| | |
|---|---|
| Partition coefficient: n-octanol/water | 3,12 |
| BCF | 25,9 |

2-ETHOSSI-1-METHYL ETHYL ACETATE

| | |
|---|---|
| Partition coefficient: n-octanol/water | 0,76 |
| BCF | 3,162 |

ETHYLBENZENE

| | |
|---|---|
| Partition coefficient: n-octanol/water | 3,6 |

BUTANOL

| | |
|---|---|
| Partition coefficient: n-octanol/water | 1 |
| BCF | 3,16 |

CYCLOHEXANONE

| | |
|---|---|
| Partition coefficient: n-octanol/water | 0,86 |

**12.4. Mobility in soil**

XYLENE (MIXTURE OF ISOMERS)

| | |
|---|---|
| Partition coefficient: soil/water | 2,73 |

2-ETHOSSI-1-METHYL ETHYL ACETATE

| | |
|---|---|
| Partition coefficient: soil/water | 1 |

BUTANOL

| | |
|---|---|
| Partition coefficient: soil/water | 0,388 |

CYCLOHEXANONE

Partition coefficient: soil/water 1,18

**12.5. Results of PBT and vPvB assessment**

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

**12.6. Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

**12.7. Other adverse effects**

Information not available

## SECTION 13. Disposal considerations

**13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
Waste transportation may be subject to ADR restrictions.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## SECTION 14. Transport information

**14.1. UN number or ID number**

ADR / RID, IMDG, IATA: 1210

**14.2. UN proper shipping name**

ADR / RID: PRINTING INK or PRINTING INK RELATED MATERIAL
IMDG: PRINTING INK or PRINTING INK RELATED MATERIAL
IATA: PRINTING INK or PRINTING INK RELATED MATERIAL

**14.3. Transport hazard class(es)**

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3


**14.4. Packing group**

ADR / RID, IMDG, IATA: III

**14.5. Environmental hazards**

| | |
|---|---|
| ADR / RID: | NO |
| IMDG: | NO |
| IATA: | NO |

**14.6. Special precautions for user**

| | | | |
|---|---|---|---|
| ADR / RID: | HIN - Kemler: 30 | Limited Quantities: 5 L | Tunnel restriction code: (D/E) |
| | Special provision: 163, 367 | | |
| IMDG: | EMS: F-E, S-D | Limited Quantities: 5 L | |
| IATA: | Cargo: | Maximum quantity: 220 L | Packaging instructions: 366 |
| | Pass.: | Maximum quantity: 60 L | Packaging instructions: 355 |
| | Special provision: | A3, A72, A192 | |

**14.7. Maritime transport in bulk according to IMO instruments**

Information not relevant

## SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

| | |
|---|---|
| Point | 3 - 40 |

Contained substance

| | | |
|---|---|---|
| Point | 75 | CYCLOHEXANONE REACH Reg.: 01-2119453616-35-xxxx |
| Point | 75 | XYLENE (MIXTURE OF ISOMERS) REACH Reg.: 01-2119488216-32-xxxx |
| Point | 75 | BUTANOL REACH Reg.: 01-2119484630-38 |
| Point | 75 | TITANIUM DIOXIDE |

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

**15.2. Chemical safety assessment**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|---|---|
| **Flam. Liq. 2** | Flammable liquid, category 2 |
| **Flam. Liq. 3** | Flammable liquid, category 3 |
| **Acute Tox. 4** | Acute toxicity, category 4 |
| **Asp. Tox. 1** | Aspiration hazard, category 1 |
| **STOT RE 2** | Specific target organ toxicity - repeated exposure, category 2 |
| **Eye Dam. 1** | Serious eye damage, category 1 |
| **Eye Irrit. 2** | Eye irritation, category 2 |
| **Skin Irrit. 2** | Skin irritation, category 2 |
| **STOT SE 3** | Specific target organ toxicity - single exposure, category 3 |
| **Skin Sens. 1** | Skin sensitization, category 1 |
| **Aquatic Chronic 1** | Hazardous to the aquatic environment, chronic toxicity, category 1 |
| **Aquatic Chronic 2** | Hazardous to the aquatic environment, chronic toxicity, category 2 |

| | |
|---|---|
| **Aquatic Chronic 3** | Hazardous to the aquatic environment, chronic toxicity, category 3 |
| **H225** | Highly flammable liquid and vapour. |
| **H226** | Flammable liquid and vapour. |
| **H302** | Harmful if swallowed. |
| **H312** | Harmful in contact with skin. |
| **H332** | Harmful if inhaled. |
| **H304** | May be fatal if swallowed and enters airways. |
| **H373** | May cause damage to organs through prolonged or repeated exposure. |
| **H318** | Causes serious eye damage. |
| **H319** | Causes serious eye irritation. |
| **H315** | Causes skin irritation. |
| **H335** | May cause respiratory irritation. |
| **H317** | May cause an allergic skin reaction. |
| **H336** | May cause drowsiness or dizziness. |
| **H410** | Very toxic to aquatic life with long lasting effects. |
| **H411** | Toxic to aquatic life with long lasting effects. |
| **H412** | Harmful to aquatic life with long lasting effects. |
| **EUH066** | Repeated exposure may cause skin dryness or cracking. |

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament

5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.
CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

For information on any exposure scenarios of the substances present in the mixture, contact Sericom Italia srl.