# Safety Data Sheet

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

**1.1. Product identifier**

Code: **6XUV00**

Product name **Tropical**

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

Intended use **Extra bright and dilating paint with U.V. For the nautical sector.**

| Identified Uses | Industrial | Professional | Consumer |
|---|---|---|---|
| For the marine industry. | - | ✔ | - |
| For resale and do it yourself. | ✔ | ✔ | ✔ |

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

Name **AEMME COLORI S.R.L.**

Full address **VIA PATTA, N.12**

District and Country **24020 RANICA (BG)**
**ITALY**

**Tel. ++39 035-513373**

**Fax ++39 035-513211**

e-mail address of the competent person

responsible for the Safety Data Sheet **laboratorio@aemmecolori.it**

**1.4. Emergency telephone number**

For urgent inquiries refer to **HSE Health and Safety Executive**
**or In ITALY:**
**Centro Antiveleni di Milano Tel. 02.66101029 (Ospedale Niguarda Ca Granda - Milano)**
**Centro Antiveleni di Roma Tel. 06.3054343 (CAV Policlinico A. Gemelli - Roma)**
**Centro Antiveleni di Pavia Tel. 0382.24444 (CAV Centro nazionale di Informazione Tossicologica- Pavia)**

## 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 2015/830.
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. |
| Specific target organ toxicity - repeated exposure, category 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Eye irritation, category 2 | H319 | Causes serious eye irritation. |
| Specific target organ toxicity - single exposure, category 3 | H336 | May cause drowsiness or dizziness. |
| 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: Warning

Hazard statements:

| | |
| --- | --- |
| **H226** | Flammable liquid and vapour. |
| **H373** | May cause damage to organs through prolonged or repeated exposure. |
| **H319** | Causes serious eye irritation. |
| **H336** | May cause drowsiness or dizziness. |
| **H412** | Harmful to aquatic life with long lasting effects. |
| **EUH066** | Repeated exposure may cause skin dryness or cracking. |
| **EUH208** | Contains:, COBALT BIS 2-ETHYL HEXANOATE, 2-BUTANONE OXIME<br>May produce an allergic reaction. |

Precautionary statements:

| | |
| --- | --- |
| **P101** | If medical advice is needed, have product container or label at hand. |
| **P102** | Keep out of reach of children. |
| **P210** | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| **P271** | Use only outdoors or in a well-ventilated area. |
| **P280** | Wear protective gloves / eye protection / face protection. |
| **P501** | Dispose of contents / container to national regulation. |

| | |
| --- | --- |
| **Contains:** | NAPHTHA (PETROL.) HYDRODESULFURIZED HEAVY<br>Dearomatized white spirit |
| | Hydrocarbons, C9, aromatics |
| | BUTANOL |

Product not intended for uses provided for by Dir. 2004/42/CE.

**2.3. Other hazards**

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

## SECTION 3. Composition/information on ingredients

**3.1. Substances**

Information not relevant

**3.2. Mixtures**

Contains:

| Identification | x = Conc. % | Classification 1272/2008 (CLP) |
|---|---|---|
| **Dearomatized white spirit** | | |
| CAS 64742-48-9 | 28,5 ≤ x < 30 | Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066, Classification note according to Annex VI to the CLP Regulation: P |
| EC 919-857-5 | | |
| INDEX - | | |
| Reg. no. 01-2119463258-33-XXXX | | |
| **NAPHTHA (PETROL.) HYDRODESULFURIZED HEAVY** | | |
| CAS 64742-82-1 | 3,5 ≤ x < 4 | Flam. Liq. 3 H226, STOT RE 1 H372, Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066, Classification note according to Annex VI to the CLP Regulation: P |
| EC 919-446-0 | | |
| INDEX - | | |
| Reg. no. 01-2119458049-33-XXXX | | |
| **XYLENE (MIXTURE OF ISOMERS)** | | |
| CAS 1330-20-7 | 3,5 ≤ x < 4 | 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, Classification note according to Annex VI to the CLP Regulation: C |
| EC 215-535-7 | | |
| INDEX 601-022-00-9 | | |
| Reg. no. 01-2119488216-32 | | |
| **Hydrocarbons, C9, aromatics** | | |
| CAS 64742-95-6 | 2 ≤ x < 2,5 | Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066, Classification note according to Annex VI to the CLP Regulation: P |
| EC 918-668-5 | | |
| INDEX - | | |
| Reg. no. 01-2119455851-35-xxxx | | |
| **2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT** | | |
| CAS 22464-99-9 | 1 ≤ x < 1,5 | Repr. 2 H361d, Skin Irrit. 2 H315 |
| EC 245-018-1 | | |
| INDEX - | | |
| Reg. no. 31 maggio 2018 | | |
| **BUTANOL** | | |
| CAS 71-36-3 | 1 ≤ x < 1,5 | 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 | | |
| INDEX 603-004-00-6 | | |
| Reg. no. 01-2119484630-38 | | |
| **2-BUTANONE OXIME** | | |
| CAS 96-29-7 | 0,89 ≤ x < 1 | Carc. 2 H351, Acute Tox. 4 H312, Eye Dam. 1 H318, Skin Sens. 1 H317 |
| EC 202-496-6 | | |
| INDEX 616-014-00-0 | | |
| Reg. no. 01-2119539477-28 | | |

**1,2,4-TRIMETHYLBENZENE**

CAS 95-63-6 | 0,6 ≤ x < 0,7 | Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 2 H411

EC 202-436-9

INDEX 601-043-00-3

**CALCIUM BIS 2-ETHYLHEXANOATE**

CAS 136-51-6 | 0,5 ≤ x < 0,6 | Repr. 2 H361d, Eye Dam. 1 H318, Skin Irrit. 2 H315

EC 205-249-0

INDEX -

Reg. no. 31 maggio 2018

**ETHYLBENZENE**

CAS 100-41-4 | 0,3 ≤ x < 0,35 | Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Aquatic Chronic 3 H412

EC 202-849-4

INDEX 601-023-00-4

Reg. no. 01-2119489370-35-XXX

**Acido esanoico, 2-etil, sale di Zinco basico**

CAS 85203-81-2 | 0,25 ≤ x < 0,3 | Repr. 2 H361d, Eye Irrit. 2 H319, Aquatic Chronic 3 H412

EC 286-272-3

INDEX -

Reg. no. 01-2119979093-30

**MESITYLENE**

CAS 108-67-8 | 0,15 ≤ x < 0,2 | Flam. Liq. 3 H226, STOT SE 3 H335, Aquatic Chronic 2 H411

EC 203-604-4

INDEX 601-025-00-5

**COBALT BIS 2-ETHYL HEXANOATE**

CAS 136-52-7 | 0,1 ≤ x < 0,15 | Repr. 2 H361f, Eye Irrit. 2 H319, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412

EC 205-250-6

INDEX -

Reg. no. 31 maggio 2018

**BENZENE**

CAS 71-43-2 | 0 ≤ x < 0,05 | Flam. Liq. 2 H225, Carc. 1A H350, Muta. 1B H340, STOT RE 1 H372, Asp. Tox. 1 H304, Eye Irrit. 2 H319, Skin Irrit. 2 H315

EC 200-753-7

INDEX 601-020-00-8

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 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing,

administer artificial respiration. Take suitable precautions for rescue workers.

**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. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. 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 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:

| | | |
|---|---|---|
| ESP | España | INSHT - Límites de exposición profesional para agentes químicos en España 2015 |
| FRA | France | JORF n°0109 du 10 mai 2012 page 8773 texte n° 102 |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits |
| ITA | Italia | Decreto Legislativo 9 Aprile 2008, n.81 |
| NLD | Nederland | Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18 |
| EU | OEL EU | Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC. |
| | TLV-ACGIH | ACGIH 2019 |

**Dearomatized white spirit**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | | |
|---|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | | |
| VLA | ESP | 290 | 50 | 580 | 100 | SKIN | |

**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 | 125 mg/kg bw/d | | | | |
| Inhalation | | | VND | 185 mg/m3 | | | VND | 871 mg/m3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Skin | | | VND | 125 mg/kg bw/d | | | VND | 208 mg/kg bw/d |

**NAPHTHA (PETROL.) HYDRODESULFURIZED HEAVY**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | | | |
|---|---|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | | | |
| VLA | ESP | 290 | 50 | 580 | 100 | SKIN | | |

**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 | 26000 mg/kg/d | | | | |
| Inhalation | | | NEA | 71000 mg/m3 | | | 330000 mg/m3 | VND |
| Skin | | | VND | 26000 mg/kg/d | | | 44000 mg/kg bw/d | VND |

**XYLENE (MIXTURE OF ISOMERS)**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | | | |
|---|---|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | | | |
| VLA | ESP | 221 | 50 | 442 | 100 | SKIN | | |
| VLEP | FRA | 221 | 50 | 442 | 100 | SKIN | | |
| WEL | GBR | 220 | 50 | 441 | 100 | | | |
| VLEP | ITA | 221 | 50 | 442 | 100 | SKIN | | |
| OEL | NLD | 210 | | 442 | | SKIN | | |
| OEL | EU | 221 | 50 | 442 | 100 | SKIN | | |
| TLV-ACGIH | | 434 | 100 | 651 | 150 | | | |

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 0,32 | mg/l |
| Normal value in marine water | 0,32 | mg/l |
| Normal value for fresh water sediment | 12,46 | mg/kg |
| Normal value for marine water sediment | 12,46 | mg/kg |
| 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 | | | VND | 14.8 mg/m3 | | | VND | 77 mg/m3 |
| Skin | | | VND | 108 mg/kg/d | | | VND | 180 mg/kg/d |

**Hydrocarbons, C9, aromatics**

**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 | 11 mg/kg bw/d | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Inhalation | | | VND | 32 mg/m3 | | VND | 150 mg/m3 |
| Skin | | | VND | 11 mg/kg bw/d | | VND | 25 mg/kg bw/d |

**2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV-ACGIH | | 5 | | 10 | | |

**BUTANOL**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| VLA | ESP | 61 | 20 | 154 | 50 | SKIN |
| VLEP | FRA | | | 150 | 50 | |
| WEL | GBR | | | 154 | 50 | SKIN |
| OEL | NLD | | | 45 | | |
| TLV-ACGIH | | 61 | 20 | | | |

**2-BUTANONE OXIME**

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 0,256 | mg/l |
| Normal value for water, intermittent release | 0,118 | mg/l |
| Normal value of STP microorganisms | 177 | mg/l |

**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 |
| Inhalation | | | 2 mg/m3 | 2,7 mg/m3 | | | 3,33 mg/m3 | 9 mg/m3 |

**1,2,4-TRIMETHYLBENZENE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| VLA | ESP | 100 | 20 | | | |
| VLEP | FRA | 100 | 20 | 250 | 50 | |
| WEL | GBR | | 25 | | | |
| VLEP | ITA | 100 | 20 | | | |
| OEL | NLD | 100 | | 200 | | |
| OEL | EU | 100 | 20 | | | |
| TLV-ACGIH | | 123 | 25 | | | |

**ETHYLBENZENE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| VLA | ESP | 441 | 100 | 884 | 200 | SKIN |

| | | | | | | |
|---|---|---|---|---|---|---|
| VLEP | FRA | 88,4 | 20 | 442 | 100 | SKIN |
| WEL | GBR | 441 | 100 | 552 | 125 | SKIN |
| VLEP | ITA | 442 | 100 | 884 | 200 | SKIN |
| OEL | NLD | 215 | | 430 | | SKIN |
| OEL | EU | 442 | 100 | 884 | 200 | SKIN |
| TLV-ACGIH | | 87 | 20 | | | |

**MESITYLENE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| VLA | ESP | 100 | 20 | | | |
| VLEP | FRA | 100 | 20 | 250 | 50 | |
| WEL | GBR | | 25 | | | |
| VLEP | ITA | 100 | 20 | | | |
| OEL | NLD | 100 | | 200 | | |
| OEL | EU | 100 | 20 | | | |
| TLV-ACGIH | | 123 | 25 | | | |

**BENZENE**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| VLA | ESP | 3,25 | 1 | | | SKIN |
| VLEP | FRA | 3,25 | 1 | | | SKIN |
| WEL | GBR | 3,25 | 1 | | | SKIN |
| OEL | NLD | 3,25 | 1 | | | SKIN |
| OEL | EU | 3,25 | 1 | | | SKIN |
| TLV-ACGIH | | 1,6 | 0,5 | 8 | 2,5 | |

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.

**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

| | |
|---|---|
| Appearance | High viscosity liquid |
| Colour | amber |
| Odour | mild |
| Odour threshold | Not available |
| pH | Not available |
| Melting point / freezing point | Not available |
| Initial boiling point | > 117 °C |
| Boiling range | Not available |
| Flash point | 23 ≤ T ≤ 60 °C |
| Evaporation Rate | Not available |
| Flammability of solids and gases | Not available |
| Lower inflammability limit | Not available |
| Upper inflammability limit | Not available |
| Lower explosive limit | Not available |
| Upper explosive limit | Not available |
| Vapour pressure | Not available |

| | |
|---|---|
| Vapour density | Not available |
| Relative density | 0,95 |
| Solubility | not soluble in water |
| Partition coefficient: n-octanol/water | Not available |
| Auto-ignition temperature | Not available |
| Decomposition temperature | Not available |
| Viscosity | >20,5 mm2/sec (40°C) |
| Explosive properties | Not available |
| Oxidising properties | Not available |

**9.2. Other information**

| | |
|---|---|
| Total solids (250°C / 482°F) | 58,03 % |
| VOC (Directive 2010/75/EC) : | 41,97 % - 398,72 g/litre |
| VOC (volatile carbon) : | 37,32 % - 354,52 g/litre |
| Appearence | clear |

## SECTION 10. Stability and reactivity

**10.1. Reactivity**

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

BUTANOL

Attacks various types of plastic materials.

2-BUTANONE OXIME

Decomposes under the effect of heat.

**10.2. Chemical stability**

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

2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT

SADT = 210°C/410°F.

**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.

BUTANOL

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

2-BUTANONE OXIME

Reacts violently with: strong oxidising agents,acids.

Above the flash point (69°C/156°F), explosive mixtures can form with air.

ETHYLBENZENE

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

**10.4. Conditions to avoid**

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

BUTANOL

Avoid exposure to: sources of heat,naked flames.

**10.5. Incompatible materials**

2-BUTANONE OXIME

Incompatible with: oxidising substances,strong acids.

**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.

2-BUTANONE OXIME

May develop: nitric oxide,carbon oxides.

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 toxicological effects**

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

LC50 (Inhalation - vapours) of the mixture:
> 20 mg/l
LC50 (Inhalation - mists / powders) of the mixture:
Not classified (no significant component)
LD50 (Oral) of the mixture:
>2000 mg/kg
LD50 (Dermal) of the mixture:
>2000 mg/kg

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral) 5627 mg/kg Rat

LD50 (Dermal) > 5000 mg/kg Rabbit

LC50 (Inhalation) 6700 ppm/1h Rat

CALCIUM BIS 2-ETHYLHEXANOATE

LD50 (Oral) 2043 mg/kg Rat - Fischer 344

LD50 (Dermal) > 2000 mg/kg Rat - Wistar

COBALT BIS 2-ETHYL HEXANOATE

LD50 (Oral) 3129 mg/kg Rat - Sprague-Dawley

LD50 (Dermal) > 2000 mg/kg Rat - Wistar

2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT

LD50 (Oral) > 5000 mg/kg Rat - Sprague-Dawley

LD50 (Dermal) > 2000 mg/kg Rat - Wistar

LC50 (Inhalation) > 4,3 mg/l/4h Rat

BENZENE

LD50 (Oral) 3340 mg/kg Rat

LD50 (Dermal) > 8260 mg/kg Rabbit

LC50 (Inhalation) 10000  Rat

ETHYLBENZENE

LD50 (Oral) 3500 mg/kg Rat

LD50 (Dermal) 15354 mg/kg Rabbit

LC50 (Inhalation) 17,2 mg/l/4h Rat

MESITYLENE

LD50 (Oral) 6000 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Rat

BUTANOL

LD50 (Oral) 790 mg/kg Rat

LD50 (Dermal) 3400 mg/kg Rabbit

LC50 (Inhalation) 8000 ppm/4h Rat

2-BUTANONE OXIME

LD50 (Oral) 2400 mg/kg Rat

LD50 (Dermal) > 1000 mg/kg Rabbit

LC50 (Inhalation) 20 mg/l/4h Rat

NAPHTHA (PETROL.) HYDRODESULFURIZED HEAVY

LD50 (Oral) > 5000 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Rabbit

Dearomatized white spirit

LD50 (Oral) > 5000 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Rabbit

LC50 (Inhalation) 4951 mg/l/4h rat

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.
Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.Contains:COBALT BIS 2-ETHYL HEXANOATE
2-BUTANONE OXIME

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

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: >20,5 mm2/sec (40°C)

## 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**

| | |
|---|---|
| XYLENE (MIXTURE OF ISOMERS) | |
| LC50 - for Fish | 2,6 mg/l/96h Oncorhynchus mykiss |
| EC50 - for Algae / Aquatic Plants | 4,36 mg/l/72h Pseudokirchneriella subcapitata |
| EC10 for Algae / Aquatic Plants | 0,44 mg/l/72h Pseudokirchneriella subcapitata |
| Chronic NOEC for Algae / Aquatic Plants | 1,57 mg/l Daphnia magna 21 gg/days |
| | |
| CALCIUM BIS 2-ETHYLHEXANOATE | |
| LC50 - for Fish | > 100 mg/l/96h Oryzias latipes |
| EC50 - for Crustacea | 910 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | 49,3 mg/l/72h Desmodesmus subspicatus |

COBALT BIS 2-ETHYL HEXANOATE

| | |
|---|---|
| LC50 - for Fish | 275 mg/l/96h Fundulus heteroclitus |

2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT

| | |
|---|---|
| LC50 - for Fish | > 100 mg/l/96h Danio rerio |
| EC50 - for Algae / Aquatic Plants | 49,3 mg/l/72h Desmodesmus subspicatus |

BENZENE

| | |
|---|---|
| LC50 - for Fish | 630 mg/l/96h Fish |

ETHYLBENZENE

| | |
|---|---|
| LC50 - for Fish | 4200 mg/l/96h Oncorhynchus mykiss |
| EC50 - for Crustacea | > 5200 mg/l/48h |
| Chronic NOEC for Fish | 3300 mg/l |

MESITYLENE

| | |
|---|---|
| LC50 - for Fish | 12,52 mg/l/96h Carassius auratus |
| EC50 - for Crustacea | 6 mg/l/48h Daphnia magna |

2-BUTANONE OXIME

| | |
|---|---|
| LC50 - for Fish | > 100 mg/l/96h Oryzias latipes |
| EC50 - for Crustacea | 201 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | 11,8 mg/l/72h Algae |

NAPHTHA (PETROL.) HYDRODESULFURIZED HEAVY

| | |
|---|---|
| LC50 - for Fish | 8,2 mg/l/96h Pimephales promelas |
| EC50 - for Crustacea | 4,5 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | 3,1 mg/l/72h Pseudokirchnerella subcapitata |

Dearomatized white spirit

| | |
|---|---|
| LC50 - for Fish | 1000 mg/l/96h Pimephales promelas |
| EC50 - for Crustacea | 1000 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | 100 mg/l/72h Pseudokirchnerella subcapitata |

Hydrocarbons, C9, aromatics

| | |
|---|---|
| LC50 - for Fish | 9,2 mg/l/96h Oncorhynchus mykiss |
| EC50 - for Crustacea | 3,2 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | 2,9 mg/l/72h Pseudokirchneriella subcapitata |

**12.2. Persistence and degradability**

XYLENE (MIXTURE OF ISOMERS)

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

Entirely degradable

>70% 28 giorni/days

CALCIUM BIS 2-ETHYLHEXANOATE
Solubility in water > 10000 mg/l
Rapidly degradable

COBALT BIS 2-ETHYL HEXANOATE
Solubility in water > 10000 mg/l
Rapidly degradable

2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT
Solubility in water < 0,1 mg/l
Rapidly degradable

BENZENE
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

ETHYLBENZENE
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

MESITYLENE
Solubility in water 0,1 - 100 mg/l
NOT rapidly degradable

1,2,4-TRIMETHYLBENZENE
Solubility in water 0,1 - 100 mg/l
Rapidly degradable

BUTANOL
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

2-BUTANONE OXIME
Solubility in water 1000 - 10000 mg/l
Entirely degradable

Dearomatized white spirit
Rapidly degradable

Hydrocarbons, C9, aromatics
Rapidly degradable

**12.3. Bioaccumulative potential**

XYLENE (MIXTURE OF ISOMERS)

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

CALCIUM BIS 2-ETHYLHEXANOATE

| | |
|---|---|
| Partition coefficient: n-octanol/water | 2,96 |

BENZENE

| | |
|---|---|
| Partition coefficient: n-octanol/water | 2,13 |
| BCF | < 10 |

ETHYLBENZENE

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

MESITYLENE

| | |
|---|---|
| Partition coefficient: n-octanol/water | 3,42 |

1,2,4-TRIMETHYLBENZENE

| | |
|---|---|
| Partition coefficient: n-octanol/water | 3,65 |
| BCF | 243 |

BUTANOL

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

2-BUTANONE OXIME

| | |
|---|---|
| Partition coefficient: n-octanol/water | 0,63 |
| BCF | 0,5 |

**12.4. Mobility in soil**

XYLENE (MIXTURE OF ISOMERS)

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

MESITYLENE

| | |
|---|---|
| Partition coefficient: soil/water | 2,87 |

1,2,4-TRIMETHYLBENZENE

| | |
|---|---|
| Partition coefficient: soil/water | 3,04 |

BUTANOL

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

2-BUTANONE OXIME

| | |
|---|---|
| Partition coefficient: soil/water | 0,55 |

NAPHTHA (PETROL.) HYDRODESULFURIZED HEAVY
Partition coefficient: soil/water 1,78

Dearomatized white spirit
Partition coefficient: soil/water 1,78

**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 greater than 0,1%.

**12.6. 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**

ADR / RID, IMDG, IATA: 1263

**14.2. UN proper shipping name**

| | |
|---|---|
| ADR / RID: | PAINT or PAINT RELATED MATERIAL |
| IMDG: | PAINT or PAINT RELATED MATERIAL |
| IATA: | PAINT or PAINT 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: 640E | | |
| IMDG: | EMS: F-E, S-E | Limited Quantities: 5 L | |
| IATA: | Cargo: | Maximum quantity: 220 L | Packaging instructions: 366 |
| | Pass.: | Maximum quantity: 60 L | Packaging instructions: 355 |
| | Special Instructions: | A3, A72, A192 | |

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

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/EC: 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 | 5-28-29 | BENZENE |

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

BENZENE

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 been performed for the following contained substances

Hydrocarbons, C9, aromatics

## 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 |
| **Carc. 1A** | Carcinogenicity, category 1A |
| **Carc. 2** | Carcinogenicity, category 2 |
| **Muta. 1B** | Germ cell mutagenicity, category 1B |
| **Repr. 2** | Reproductive toxicity, category 2 |
| **Acute Tox. 4** | Acute toxicity, category 4 |
| **STOT RE 1** | Specific target organ toxicity - repeated exposure, category 1 |
| **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 Acute 1** | Hazardous to the aquatic environment, acute 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. |
| **H350** | May cause cancer. |
| **H351** | Suspected of causing cancer. |
| **H340** | May cause genetic defects. |
| **H361d** | Suspected of damaging the unborn child. |
| **H361f** | Suspected of damaging fertility. |
| **H302** | Harmful if swallowed. |
| **H312** | Harmful in contact with skin. |
| **H332** | Harmful if inhaled. |
| **H372** | Causes damage to organs through prolonged or repeated exposure. |
| **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. |
| **H400** | Very toxic to aquatic life. |
| **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
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 NUMBER: 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: EC Regulation 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 STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

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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.