

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

www.cecchi.it info@cecchi.it



NAUTILUS EPOXY PRIMER Component B - SAFETY DATA SHEET - february 2019 - 058/059-Ai - rev. 1/2018

Safety Data Sheet

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

1.1. Product identifier

Product name **COMPONENTE B PER NAUTILUS EPOXY PRIMER**

Chemical name and synonym **INDURITORE PER EPOSSIDICI**

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

Intended use **VERNICI / SMALTI NAUTICA-MARINA**

| Identified Uses | Industrial | Professional | Consumer |
|---|------------|--------------|----------|
| Paint product for boating | ✓ | ✓ | ✓ |
| Paint product for industrial uses | ✓ | - | - |
| Prodotto verniciante per nautica indoor | ✓ | ✓ | ✓ |
| Paint product for professional use | - | ✓ | - |

1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier:

Cecchi Gustavo & C. srl - Via M. Coppino 253,
55049 Viareggio (LU) ITALY www.cecchi.it - info@cecchi.it

1.4 Emergency telephone number:

+39 0584/383694 - info@cecchi.it

From monday to friday office hours 8:30 - 12:30, 14:00 - 18:30

- azienda Tel.+39 035 847453

- CAV "

Osp. Pediatrico Bambino Gesù"

Dip. Emergenza e Accettazione DEA,

Roma Piazza Sant'Onofrio, 4 - 00165 06 68593726

- Az. Osp. Univ. Foggia Foggia

V.le Luigi Pinto, 1 - 71122 800183459

- Az. Osp. "A. Cardarelli" Napoli

Via A. Cardarelli, 9 - 80131 081-7472870

- CAV Policlinico "Umberto I"

Roma

V.le del Policlinico, 155 -00161 06-49978000

- CAV Policlinico "A. Gemelli"

Roma

Largo Agostino Gemelli, 8 -00168 06-3054343

- Az. Osp. "Careggi" U.O. Tossic. Medica Firenze

Largo Brambilla, 3 - 50134 055-7947819

- CAV Centro Nazionale di Info. Tossic. Pavia

Via Salvatore Maugeri, 10- 27100 0382-24444

- Osp. Niguarda Ca' Granda Milano

Piazz. Ospedale Maggiore,3 - 20102 66101029

- Azienda Ospedaliera Papa Giovanni XXII Bergamo

Piazza OMS, 1 - 24127 800883300

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

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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. |
| Skin corrosion, category 1B | H314 | Causes severe skin burns and eye damage. |
| Serious eye damage, category 1 | H318 | Causes serious eye damage. |
| Specific target organ toxicity - single exposure, category 3 | H335 | May cause respiratory irritation. |
| Skin sensitization, category 1A | H317 | May cause an allergic skin reaction. |
| Specific target organ toxicity - single exposure, category 3 | H336 | May cause drowsiness or dizziness. |
| Hazardous to the aquatic environment, chronic toxicity, category 2 | H411 | Toxic 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. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H314 | Causes severe skin burns and eye damage. |
| H335 | May cause respiratory irritation. |
| H317 | May cause an allergic skin reaction. |
| H336 | May cause drowsiness or dizziness. |
| H411 | Toxic to aquatic life with long lasting effects. |
| EUH208 | Contains: 2,4,6-TRIS (DIMETILAMMINOMETIL) FENOLO May produce an allergic reaction. |

Precautionary statements:

| | |
|----------------|--|
| P501 | Dispose of contents / container to . . . |
| P102 | Keep out of reach of children. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P260 | Do not breathe dust / fume / gas / mist / vapours / spray. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |

Contains: XYLENE (MIXTURE OF ISOMERS)

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3-AMINOPROPYLTRI-ETHOXYSILANO

ISOBUTYL ALCOHOL

BUTANOL

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

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

3.2. Mixtures

Contains:

| Identification | x = Conc. % | Classification 1272/2008 (CLP) |
|--|------------------|--|
| XYLENE (MIXTURE OF ISOMERS) | | |
| CAS 1330-20-7 | $30 \leq x < 35$ | 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 | | |
| INDEX 601-022-00-9 | | |
| Reg. no. 01-2119488216-32-XXXX | | |
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | | |
| CAS 68082-29-1 | $30 \leq x < 35$ | Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Chronic 2 H411 |
| EC 500-191-5 | | |
| INDEX - | | |
| Reg. no. 01-2119972320-44-XXXX | | |
| ISOBUTYL ALCOHOL | | |
| CAS 78-83-1 | $10 \leq x < 15$ | Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336 |
| EC 201-148-0 | | |
| INDEX 603-108-00-1 | | |
| Reg. no. 01-2119484609-23 | | |
| 4-METHYLPENTAN-2-ONE | | |
| CAS 108-10-1 | $10 \leq x < 15$ | Flam. Liq. 2 H225, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335, EUH066 |
| EC 203-550-1 | | |
| INDEX 606-004-00-4 | | |
| Reg. no. 01-2119473980-30 | | |
| 3-AMINOPROPYLTRI-ETHOXYSILANO | | |
| CAS 919-30-2 | $5 \leq x < 7,5$ | Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317 |

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EC 213-048-4

INDEX 612-108-00-0

Reg. no. 01-2119480479-24-0001

BUTANOL

CAS 71-36-3 $5 \leq x < 7,5$ 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-xxxx

2,4,6-TRIS

(DIMETILAMMINOMETIL) FENOLO

CAS 90-72-2 $0,45 \leq x < 0,5$ Skin Corr. 1C H314, Eye Dam. 1 H318, Skin Sens. 1B H317

EC 202-013-9

INDEX 603-069-00-0

Reg. no. 01-2119560597-27

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.

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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.

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Storage class TRGS 510 (Germany):

3

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

| | | |
|-----|----------------|---|
| DEU | Deutschland | TRGS 900 (Fassung 31.1.2018 ber.) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte |
| ESP | España | INSHT - Límites de exposición profesional para agentes químicos en España 2017 |
| 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 Council of Netherlands (SER) Values, AF 2011:18 |
| POL | Polska | ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 7 czerwca 2017 r |
| PRT | Portugal | Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República I 26; 2012-02-06 |
| ROU | România | Monitorul Oficial al României 44; 2012-01-19 |
| EU | OEL EU | 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 91/322/EEC. |
| | TLV-ACGIH | ACGIH 2018 |

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | |
|-----------|---------|-------------------|-----|-------------------|-----|------|
| | | mg/m ³ | ppm | mg/m ³ | ppm | |
| AGW | DEU | 440 | 100 | 880 | 200 | SKIN |
| MAK | DEU | 440 | 100 | 880 | 200 | SKIN |
| 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 |
| NDS | POL | 100 | | | | |
| OEL | EU | 221 | 50 | 442 | 100 | SKIN |
| TLV-ACGIH | | 434 | 100 | 651 | 150 | |

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 of STP microorganisms | 6,58 | mg/l |
| Normal value for the terrestrial compartment | 2,31 | mg/kg |

Health - Derived no-effect level - DNEL / DMEL

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| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | 1.6 mg/kg bw/d | | | | |
| Inhalation | 174 mg/m3 | 174 mg/m3 | | 14.8 mg/m3 | 289 mg/m3 | 289 mg/m3 | | 77 mg/m3 |
| Skin | | 108 mg/kg bw/d | | | | 180 mg/kg bw/d | | |

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

Predicted no-effect concentration - PNEC

| | | |
|--|--------|---------|
| Normal value in fresh water | 0,004 | mg/l |
| Normal value in marine water | 0 | mg/l |
| Normal value for fresh water sediment | 434,02 | mg/kg |
| Normal value for marine water sediment | 43,4 | mg/kg |
| Normal value for the terrestrial compartment | 86,78 | mg/kg/d |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|-----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Inhalation | | | | 0,97 mg/m3 | | | | 3,9 mg/m3 |
| Skin | | 0,56 mg/kg bw/d | | | | 1,1 mg/kg bw/d | | |

4-METHYLPENTAN-2-ONE**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|-----------|---------|--------|-----|------------|-----|------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 83 | 20 | 166 | 40 | SKIN |
| MAK | DEU | 83 | 20 | 166 | 40 | SKIN |
| VLA | ESP | 83 | 20 | 208 | 50 | |
| VLEP | FRA | 83 | 20 | 208 | 50 | |
| WEL | GBR | 208 | 50 | 416 | 100 | SKIN |
| VLEP | ITA | 83 | 20 | 208 | 50 | |
| OEL | NLD | 104 | | 208 | | |
| NDS | POL | 83 | | 200 | | |
| VLE | PRT | 83 | 20 | 208 | 50 | |
| TLV | ROU | 83 | 20 | 208 | 50 | |
| OEL | EU | 83 | 20 | 208 | 50 | |
| TLV-ACGIH | | 82 | 20 | 307 | 75 | |

Predicted no-effect concentration - PNEC

| | | |
|--|------|----------|
| Normal value in fresh water | 600 | µg/L |
| Normal value in marine water | 60 | µg/L |
| Normal value for fresh water sediment | 8,27 | mg/kg/d |
| Normal value for marine water sediment | 830 | µg/kg/dw |
| Normal value for water, intermittent release | 1,5 | mg/l |
| Normal value of STP microorganisms | 27,5 | mg/l |

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Normal value for the terrestrial compartment 1,3 mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | NPI | | 4,2 mg/kg/d | | | | |
| Skin | NPI | NPI | | | NPI | NPI | | |

ISOBUTYL ALCOHOL**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | |
|-----------|---------|--------|-----|------------|-----|
| | | mg/m3 | ppm | mg/m3 | ppm |
| AGW | DEU | 310 | 100 | 310 | 100 |
| MAK | DEU | 310 | 100 | 310 | 100 |
| VLA | ESP | 154 | 50 | | |
| VLEP | FRA | 150 | 50 | | |
| WEL | GBR | 154 | 50 | 231 | 75 |
| OEL | NLD | 150 | | | |
| NDS | POL | 100 | | 200 | |
| TLV-ACGIH | | 152 | 50 | | |

Predicted no-effect concentration - PNEC

| | | |
|--|--------|------------|
| Normal value in fresh water | 0,4 | mg/l |
| Normal value in marine water | 0,04 | mg/l |
| Normal value for fresh water sediment | 1,52 | mg/kg d.w |
| Normal value for marine water sediment | 0,152 | mg/kg d.w. |
| Normal value for water, intermittent release | 11 | mg/l |
| Normal value of STP microorganisms | 10 | mg/l |
| Normal value for the terrestrial compartment | 0,0699 | mg/kg d.w |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | | | | 25 mg/kg d.w. | VND |
| Inhalation | | | 310 mg/m3 | VND | | | 55 mg/m3 | VND |

3-AMINOPROPYLTRI-ETHOXYSILANO**Predicted no-effect concentration - PNEC**

| | | |
|--|-----|---------|
| Normal value in fresh water | 330 | µg/L |
| Normal value in marine water | 33 | µg/L |
| Normal value for fresh water sediment | 12 | mg/kg/d |
| Normal value for marine water sediment | 120 | µg/kg/d |
| Normal value for water, intermittent release | 3,3 | mg/l |
| Normal value of STP microorganisms | 13 | mg/l |
| Normal value for the terrestrial compartment | 50 | µg/kg/d |

Health - Derived no-effect level - DNEL / DMEL

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Skin

0,2 mg/kg

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 Directive 89/686/EEC 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, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (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

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| | |
|--|-----------------------------------|
| Appearance | liquid |
| Colour | TRANSPARENT AMBER |
| Odour | TYPICAL AMINES |
| Odour threshold | Not available |
| pH | Not available |
| Melting point / freezing point | Not available |
| Initial boiling point | > 35 °C |
| Boiling range | Not available |
| Flash point | > 23 °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 | 0,89 |
| Solubility | 20% BY WT IN WATER |
| Partition coefficient: n-octanol/water | Not available |
| Auto-ignition temperature | Not available |
| Decomposition temperature | Not available |
| Viscosity | >20,5 mm ² /sec (40°C) |
| Explosive properties | Not available |
| Oxidising properties | Not available |

9.2. Other information

| | |
|------------------------------|--------------------------|
| Total solids (250°C / 482°F) | 37,96 % |
| VOC (Directive 2010/75/EC) : | 62,04 % - 553,66 g/litre |

SECTION 10. Stability and reactivity

10.1. Reactivity

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

4-METHYLPENTAN-2-ONE

Reacts violently with: light metals. Attacks various types of plastic materials.

BUTANOL

Attacks various types of plastic materials.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

XYLENE (MIXTURE OF ISOMERS)

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

www.cecchi.it info@cecchi.it



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XYLENE (MIXTURE OF ISOMERS): stable, but may develop violent reactions in the presence of strong oxidising agents such as sulphuric and nitric acids and perchlorates. May form explosive mixtures with the air.

4-METHYLPENTAN-2-ONE

May react violently with: oxidising agents. Forms peroxides with: air. Forms explosive mixtures with: hot air.

BUTANOL

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

10.4. Conditions to avoid

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

4-METHYLPENTAN-2-ONE

Avoid exposure to: sources of heat.

BUTANOL

Avoid exposure to: sources of heat, naked flames.

10.5. Incompatible materials

4-METHYLPENTAN-2-ONE

Incompatible with: oxidising substances, reducing substances.

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.

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

XYLENE (MIXTURE OF ISOMERS)

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

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XYLENE (MIXTURE OF ISOMERS): has a toxic effect on the CNS (encephalopathies). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

> 20 mg/l

LD50 (Oral) of the mixture:

>2000 mg/kg

LD50 (Dermal) of the mixture:

>2000 mg/kg

ISOBUTYL ALCOHOL

LD50 (Oral) 2460 mg/kg Rat

LD50 (Dermal) 2460 mg/kg Rabbit

LC50 (Inhalation) 18,18 mg/l/4h Rat

BUTANOL

LD50 (Oral) 790 mg/kg Rat

LD50 (Dermal) 3400 mg/kg Rabbit

LC50 (Inhalation) 8000 ppm/4h Rat

4-METHYLPENTAN-2-ONE

LD50 (Oral) 2080 mg/kg Rat

LD50 (Dermal) > 16000 mg/kg Rabbit

LC50 (Inhalation) > 8,2 mg/l/4h Rat

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

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Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

LD50 (Oral) > 2000 mg/kg bw ratto

LD50 (Dermal) > 2000 mg/kg bw ratto

3-AMINOPROPYLTRI-ETHOXYSILANO

LD50 (Oral) > 1570 mg/kg ratto

LD50 (Dermal) > 3800 mg/kg coniglio

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral) 3500 mg/kg Rat

LD50 (Dermal) 4350 mg/kg Rabbit

LC50 (Inhalation) 26 mg/l/4h Rat

2,4,6-TRIS (DIMETILAMMINOMETIL) FENOLO

LD50 (Oral) > 1200 mg/kg rat

LD50 (Dermal) > 1280 mg/kg rat

SKIN CORROSION / IRRITATION

Corrosive for the skin

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

May produce an allergic reaction. Contains: 2,4,6-TRIS (DIMETILAMMINOMETIL) FENOLO

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

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REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation
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 is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

12.1. Toxicity

ISOBUTYL ALCOHOL

| | |
|-----------------------------------|-------------------------------------|
| LC50 - for Fish | > 1,43 mg/l/96h Pimephales promelas |
| EC50 - for Crustacea | > 1,1 mg/l/48h Daphnia pulex |
| EC50 - for Algae / Aquatic Plants | > 3,48 mg/l/72h DAFNIE |

BUTANOL

| | |
|----------------------|---|
| LC50 - for Fish | > 1730 mg/l/96h PESCI (CAVEDANO AMERICANO) |
| EC50 - for Crustacea | > 1983 mg/l/48h DAFNIA MAGNA |

4-METHYLPENTAN-2-ONE

| | |
|----------------------|----------------|
| LC50 - for Fish | > 179 mg/l/96h |
| EC50 - for Crustacea | > 200 mg/l/48h |

Fatty acids, C18-unsatd., dimers, oligomeric
reaction products with tall-oil fatty acids and
triethylenetetramine

| | |
|-----------------------------------|-----------------|
| LC50 - for Fish | > 10 mg/l/96h |
| EC50 - for Algae / Aquatic Plants | > 4,34 mg/l/72h |

3-AMINOPROPYLTRI-ETHOXYSILANO

| | |
|----------------------|------------------------------|
| LC50 - for Fish | > 2208 mg/l/96h pesci |
| EC50 - for Crustacea | > 331 mg/l/48h Daphnia magna |

XYLENE (MIXTURE OF ISOMERS)

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

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LC50 - for Fish > 4,2 mg/l/96h Oncorhynchus mykiss

EC50 - for Crustacea > 2,93 mg/l/48h Daphnia Magna

2,4,6-TRIS (DIMETILAMMINOMETIL)

FENOLO

LC50 - for Fish > 175 mg/l/96h CYORINUS CARPIO

Chronic NOEC for Algae / Aquatic Plants > 6,25 mg/l

12.2. Persistence and degradability

ISOBUTYL ALCOHOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

BUTANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

4-METHYLPENTAN-2-ONE

Solubility in water > 10000 mg/l

Degradability: information not available

Rapidly degradable

XYLENE (MIXTURE OF ISOMERS)

Solubility in water 100 - 1000 mg/l

Degradability: information not available

12.3. Bioaccumulative potential

ISOBUTYL ALCOHOL

Partition coefficient: n-octanol/water 1

BUTANOL

Partition coefficient: n-octanol/water 1

BCF 3,16

4-METHYLPENTAN-2-ONE

Partition coefficient: n-octanol/water 1,9

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water 3,12

BCF 25,9

12.4. Mobility in soil

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

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ISOBUTYL ALCOHOL

Partition coefficient: soil/water 0,31

BUTANOL

Partition coefficient: soil/water 0,388

4-METHYLPENTAN-2-ONE

Partition coefficient: soil/water 2,008

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water 2,73

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, 3470
IATA:

14.2. UN proper shipping name

ADR / RID: PAINT, CORROSIVE, FLAMMABLE or PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE

IMDG: PAINT, CORROSIVE, FLAMMABLE or PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE (Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine)

IATA: PAINT, CORROSIVE, FLAMMABLE or PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE

14.3. Transport hazard class(es)

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

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ADR / RID: Class: 8 Label: 8 (3)



IMDG: Class: 8 Label: 8 (3)



IATA: Class: 8 Label: 8 (3)



14.4. Packing group

ADR / RID, IMDG, IATA: II

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 83

Limited Quantities: 1 L

Tunnel restriction code: (D/E)

Special Provision: -

IMDG: EMS: F-E, S-C

Limited Quantities: 1 L

IATA: Cargo:

Maximum quantity: 30 L

Pass.:

Maximum quantity: 1 L

Special Instructions:

A72, A192

Packaging instructions: 855
Packaging instructions: 851

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-E2

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

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

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Product

Point 3 - 40

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:

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.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 2: Hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

XYLENE (MIXTURE OF ISOMERS)

4-METHYLPENTAN-2-ONE

ISOBUTYL ALCOHOL

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

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

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| | |
|-------------------|--|
| Asp. Tox. 1 | Aspiration hazard, category 1 |
| STOT RE 2 | Specific target organ toxicity - repeated exposure, category 2 |
| Skin Corr. 1B | Skin corrosion, category 1B |
| Skin Corr. 1C | Skin corrosion, category 1C |
| 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 |
| Skin Sens. 1A | Skin sensitization, category 1A |
| Skin Sens. 1B | Skin sensitization, category 1B |
| 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. |
| H314 | Causes severe skin burns and eye damage. |
| 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. |
| 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

CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY

tel. +39 0584 383694 fax +39 0584 395182

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- 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).

GENERAL BIBLIOGRAPHY

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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.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 15 / 16.