# Safety data sheet

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

**1.1. Product identifier**

Product name **FILAFOB**

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

Intended use **Anti stains product for natural stone, concrete and terracotta.**

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

Name **FILA INDUSTRIA CHIMICA S.P.A.**
Full address **Via Garibaldi, 58**
District and Country **35018 San Martino di Lupari (PD)**
**ITALIA**

**Tel. +39.049.9467300**

**Fax +39.049.9460753**

e-mail address of the competent person

responsible for the Safety Data Sheet **sds@filasolutions.com**

**1.4. Emergency telephone number**

For urgent inquiries refer to **TEL +39.049.9467300**
**UNITED KINGDOM: NHS Direct - +44 0845 4647 or 111 (In England and Wales); NHS 24 - +44 08454 24 24 24 (In Scotland) -**

## 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 EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

**2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.**

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. |
| Hazardous to the aquatic environment, chronic toxicity, category 4 | H413 | May cause long lasting harmful effects to aquatic life. |

**2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.**

Danger Symbols:
Xn
R phrases:
10-53-65-66

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

**2.2. Label elements.**

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


Signal words: Danger

Hazard statements:

| | |
|---|---|
| **H226** | Flammable liquid and vapour. |
| **H304** | May be fatal if swallowed and enters airways. |
| **H413** | May cause long lasting harmful effects to aquatic life. |
| **EUH066** | Repeated exposure may cause skin dryness or cracking. |

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. |
| **P233** | Keep container tightly closed. |
| **P273** | Avoid release to the environment. |
| **P280** | Wear protective gloves / eye protection / face protection. |
| **P301+P310** | IF SWALLOWED: immediately call a POISON CENTER / doctor / . . . |
| **P501** | Dispose of contents / container in accordance with local/regional/national/international regulation. |

**Contains:** Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics
C11-C15 ISO-ALKANES

**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.** | **Conc. %.** | **Classification 67/548/EEC.** | **Classification 1272/2008 (CLP).** |
|---|---|---|---|
| **Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics**<br>CAS. -<br>EC. 923-037-2<br>INDEX. - | 50 - 100 | R10, R53, R66, Xn R65 | Flam. Liq. 3 H226, Asp. Tox. 1 H304, Aquatic Chronic 4 H413, EUH066 |

| | | | |
|---|---|---|---|
| Reg. no. 01-2119471991-29 | | | |
| **DIPROPYLENE GLYCOL MONOMETHYL ETHER** | | | |
| CAS. 34590-94-8<br>EC. 252-104-2<br>INDEX. - | 5 - 9 | | Substance with a community workplace exposure limit. |
| Reg. no. 01-2119450011-60 | | | |
| **C11-C15 ISO-ALKANES** | | | |
| CAS. 90622-58-5<br>EC. 292-460-6<br>INDEX. - | 1 - 5 | R66, Xn R65 | Asp. Tox. 1 H304, STOT SE 3 H336, EUH066 |

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.
T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

## 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.

For symptoms and effects caused by the contained substances, see chap. 11.

### 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.

**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. Check incompatibility for container material in section 7. 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. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

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

Store only in the original container. 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:

| | | |
|---|---|---|
| AUS | Österreich | Grenzwerteverordnung 2011 - GKV 2011 |
| BEL | Belgique | AR du 11/3/2002. La liste est mise à jour pour 2010 |
| CYP | Κύπρος | Κ.Δ.Π. 268/2001; Κ.Δ.Π. 55/2004; Κ.Δ.Π. 295/2007; Κ.Δ.Π. 70/2012 |
| CZE | Česká Republika | Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci |
| DEU | Deutschland | MAK-und BAT-Werte-Liste 2012 |
| DNK | Danmark | Graensevaerdier per stoffer og materialer |
| ESP | España | INSHT - Límites de exposición profesional para agentes químicos en España 2015 |
| FIN | Suomi | HTP-arvot 2012. Haitallisiksi tunnetut pitoisuudet - Sosiaali- ja terveysministeriön julkaisuja 2012:5 |
| FRA | France | JORF n°0109 du 10 mai 2012 page 8773 texte n° 102 |
| GRB | United Kingdom | EH40/2005 Workplace exposure limits |
| GRC | Ελλάδα | ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012 |
| HUN | Magyarország | 50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról |
| IRL | Éire | Code of Practice Chemical Agent Regulations 2011 |
| ITA | Italia | Decreto Legislativo 9 Aprile 2008, n.81 |
| NOR | Norge | Veiledning om Administrative normer for forurensning i arbeidsatmosfære |
| POL | Polska | ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r |
| SVK | Slovensko | NARIADENIE VLÁDY Slovenskej republiky z 20. júna 2007 |
| SVN | Slovenija | Uradni list Republike Slovenije 15. 6. 2007 |
| SWE | Sverige | Occupational Exposure Limit Values, AF 2011:18 |
| TUR | Türkiye | 2000/39/EC sayılı Direktifin ekidir |
| EU | OEL EU | Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. |
| | TLV-ACGIH | ACGIH 2014 |

**Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics**

**Threshold Limit Value.**

| Type | Country | TWA/8h | | STEL/15min | |
|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm |
| TLV-ACGIH | | 1840 | | | |

| Predicted no-effect concentration - PNEC. | |
|---|---|
| Normal value in fresh water | VND |
| Normal value in marine water | VND |

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

| Route of exposure | Effects on consumers. Acute local | Acute systemic | Chronic local | Chronic systemic | Effects on workers Acute local | Acute systemic | Chronic local | Chronic systemic |
|---|---|---|---|---|---|---|---|---|
| Inhalation. | | | VND | VND | | | VND | VND |

**DIPROPYLENE GLYCOL MONOMETHYL ETHER**

**Threshold Limit Value.**

| Type | Country | TWA/8h | | STEL/15min | | |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| MAK | AUS | 307 | 50 | 614 | 100 | SKIN. |
| VLEP | BEL | 308 | 50 | | | SKIN. |
| TLV | CYP | 308 | 50 | | | SKIN. |
| TLV | CZE | 270 | | 550 | | SKIN. |
| AGW | DEU | 310 | 50 | 310 | 50 | |
| MAK | DEU | 310 | 50 | 310 | 50 | |
| TLV | DNK | 300 | 50 | | | |
| VLA | ESP | 308 | 50 | | | SKIN. |
| HTP | FIN | 310 | 50 | | | |
| VLEP | FRA | 308 | 50 | | | SKIN. |
| WEL | GRB | 308 | 50 | | | SKIN. |
| TLV | GRC | 600 | 100 | 900 | 150 | |
| AK | HUN | 308 | | 308 | | |
| OEL | IRL | 308 | 50 | | | SKIN. |
| TLV | ITA | 308 | 50 | | | SKIN. |
| TLV | NOR | 300 | 50 | | | SKIN. |
| NDS | POL | 240 | | 480 | | |
| NPHV | SVK | 308 | 50 | | | SKIN. |
| MV | SVN | 308 | 50 | | | SKIN. |
| MAK | SWE | 300 | 50 | 450 | 75 | SKIN. |
| ESD | TUR | 308 | 50 | | | SKIN. |
| OEL | EU | 308 | 50 | | | SKIN. |
| TLV-ACGIH | | 606 | 100 | 909 | 150 | SKIN. |

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. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

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 I 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, 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 | liquid |
| Colour | Not available. |
| Odour | characteristic |
| Odour threshold. | Not available. |
| pH. | N. A. |
| Melting point / freezing point. | Not available. |
| Initial boiling point. | Not available. |
| Boiling range. | Not available. |
| Flash point. | > 40 °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. | 0,763 Kg/l |
| Solubility | insoluble in water |
| Partition coefficient: n-octanol/water | Not available. |
| Auto-ignition temperature. | Not available. |
| Decomposition temperature. | Not available. |
| Viscosity | Not available. |

| | |
|---|---|
| Explosive properties | Not available. |
| Oxidising properties | Not available. |

**9.2. Other information.**

| | |
|---|---|
| VOC (Directive 2010/75/EC) : | 6,50 % - 49,60 g/litre. |
| VOC (volatile carbon) : | 3,68 % - 28,11 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.

**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.

**10.4. Conditions to avoid.**

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

**10.5. Incompatible materials.**

Information not available.

**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.

**11.1. Information on toxicological effects.**

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.
The introduction of even small quantities of this liquid into the respiratory system in case of ingestion or vomit may cause bronchopneumonia and pulmonary edema.

This product may have a degreasing action on the skin, producing dryness and chapped skin after repeated exposure.

Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics
LD50 (Oral).> 5000 mg/Kg
LD50 (Dermal).> 5000 mg/Kg
LC50 (Inhalation).> 5000 mg/m3

## SECTION 12. Ecological information.

This product may damage the structure and/or the functions of the aquatic ecosystems in the long and/or delayed term.

**12.1. Toxicity.**

| | |
|---|---|
| Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics | |
| Chronic NOEC for Algae / Aquatic Plants. | 0,02 mg/l daphnia magna |

**12.2. Persistence and degradability.**

| | |
|---|---|
| DIPROPYLENE GLYCOL MONOMETHYL ETHER | |
| Solubility in water. | mg/l 1000 - 10000 |

Rapidly biodegradable.

**12.3. Bioaccumulative potential.**

| | |
|---|---|
| DIPROPYLENE GLYCOL MONOMETHYL ETHER | |
| Partition coefficient: n-octanol/water. | 0,0043 |

**12.4. Mobility in soil.**

Information not available.

**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: 3295

The product, if packaged in packages of less than 450 litres, is not subject to ADR regulations as stated in 2.2.3.1.5.
The product, if packaged in packages of less than 30 litres, is not subject to obligations relating to marking, labelling and package testing in accordance with 2.3.2.5 of the IMDG CODE.

**14.2. UN proper shipping name.**

| | |
|---|---|
| ADR / RID: | HYDROCARBONS, LIQUIDS, N.O.S. (ISODECANE AND n-DECANE) |
| IMDG: | HYDROCARBONS, LIQUIDS, N.O.S. (ISODECANE AND n-DECANE) |
| IATA: | HYDROCARBONS, LIQUIDS, N.O.S. (ISODECANE AND n-DECANE) |

**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

**14.6. Special precautions for user.**

| | | | |
|---|---|---|---|
| ADR / RID: | HIN - Kemler: 30 | Limited Quantities: - | Tunnel restriction code: - |
| | Special Provision: - | | |
| IMDG: | EMS: F-E, S-D | Limited Quantities: - | |
| IATA: | Cargo: | Maximum quantity: 60 L | Packaging instructions: 307 |
| | Pass.: | Maximum quantity: 5 L | Packaging instructions: 305 |
| | Special Instructions: | - | |

**14.7. Transport in bulk according to Annex II of MARPOL73/78 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. 6

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

Product.
Point. 3 - 40

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (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.

**15.2. Chemical safety assessment.**

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

DIPROPYLENE GLYCOL MONOMETHYL ETHER

## SECTION 16. Other information.

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

| | |
|---|---|
| **Flam. Liq. 3** | Flammable liquid, category 3 |
| **Asp. Tox. 1** | Aspiration hazard, category 1 |
| **STOT SE 3** | Specific target organ toxicity - single exposure, category 3 |
| **Aquatic Chronic 4** | Hazardous to the aquatic environment, chronic toxicity, category 4 |
| **H226** | Flammable liquid and vapour. |
| **H304** | May be fatal if swallowed and enters airways. |
| **H336** | May cause drowsiness or dizziness. |
| **H413** | May cause long lasting harmful effects to aquatic life. |
| **EUH066** | Repeated exposure may cause skin dryness or cracking. |

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

| | |
|---|---|
| **R10** | FLAMMABLE. |
| **R53** | MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT. |
| **R65** | HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED. |
| **R66** | 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).

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EU) 1907/2006 (REACH) of the European Parliament
4. Regulation (EU) 1272/2008 (CLP) of the European Parliament
5. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EU) 453/2010 of the European Parliament
7. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
9. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
10. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
11. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

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:
14.