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

1.1 Product identifier
Trade name: K-FLEX SPECIAL THINNER
Chemical name and synonym: THINNER FOR ADHESIVES

1.2 Relevant identified uses of the substance or mixture and uses advised against
Intended use: Thinner for adhesives recommended for professional use only. Retail sale and use is prohibited.

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
L'Isolante K-FLEX S.p.A.
via Don Locatelli, 35 20877 Roncello (MB) ITALY
Tel. +39 039 6824.1
e-mail: Kflex-Reach@kflex.com
Further information obtainable from: R&D Dept.

1.4 Emergency telephone number:
Tel. +39 039 6824.1 (9.00-17.00)
Centro Antiveleni Milano 02-66101029 (CAV Ospedale Niguarda Ca'Granda -Milano) (h24)
Centro Antiveleni Pavia 0382-24444 (CAV IRCCS Fondazione Maugeri-Pavia)
Centro Antiveleni di Bergamo 800883300 (CAV Ospedali Riuniti-Bergamo)
Centro Antiveleni di Firenze 055-7947819 (CAV Ospedale Careggi- Firenze)
Centro Antiveleni di Roma 06-3054343 (CAV Policlinico Gemelli-Roma)
Centro Antiveleni di Roma 06-49978000 (CAV Policlinico Umberto I - Roma)
Centro Antiveleni di Napoli 081-7472870 (CAV Ospedale Cardarelli - Napoli)

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.

Hazard classification and indication:
- Flammable liquid, category 2: H225
  - Highly flammable liquid and vapour
- 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 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.
Safety data sheet
According to Annex II to REACH – Regulation 2015/830

K-FLEX SPECIAL THINNER

Hazard pictograms:

Signal word: Danger

Hazard statements:
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P301+P330+P312 Keep out of the reach of children.
P370+P378 In case of fire: use carbon dioxide, foam, chemical powder. Do not use water.
P273 Avoid release to the environment.

Contains: ACETONE
ETHYL ACETATE
HEPTANE

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:

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<tr>
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| ACETONE       |          |                               |
| CAS 67-64-1   |          |                               |
| EC 200-662-2  |          |                               |
| INDEX 606-001-00-8 | | Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066 |
| Reg. no. 01-2119471330-49 | | |

K-FLEX SPECIAL THINNER
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Safety data sheet
According to Annex II to REACH – Regulation 2015/830

K-FLEX SPECIAL THINNER

HEPTANE
CAS 142-82-5  
5 ≤ x < 10 Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3
H336, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1, Classification note according to Annex VI to the CLP Regulation:C

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

SECTION 4: First aid measures
4.1 Description of first aid measures
EYES: Remove contact lenses, if present Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.
4.2 Most important symptoms and effects, both acute and delayed
Specific information on symptoms and effects caused by the product are unknown.
4.3 Indication of any immediate medical attention and special treatment needed
Information not available.

SECTION 5: Firefighting measures
5.1 Extinguishing media
SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.
5.2 Special hazards arising from the substance or mixture
HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products..
5.3 Advice for firefighters
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.
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:

<table>
<thead>
<tr>
<th>Country</th>
<th>Ethyl Acetate Threshold Limit Value</th>
<th>TWA/8h mg/m³</th>
<th>STEL/15 min mg/m³</th>
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Predicted no-effect concentration - PNEC

| Normal value in fresh water | 0.24 mg/l |
| Normal value in marine water | 0.02 mg/l |
| Normal value for fresh water sediment | 1.15 mg/kg/d |
| Normal value for marine water sediment | 0.115 mg/kg/d |
Safety data sheet
According to Annex II to REACH – Regulation 2015/830

K-FLEX SPECIAL THINNER

Normal value of STP microorganisms 650 mg/l
Normal value for the food chain (secondary poisoning) 0,2 g/kg
Normal value for the terrestrial compartment 0,148 mg/kg/d

Health – Derived no-effect level - DNEL / DMEL

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Effects on consumers</th>
<th>Effects on workers</th>
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<tr>
<td></td>
<td>Acute systemic</td>
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Threshold Limit Value

Type

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Predicted no-effect concentration - PNEC
Normal value in fresh water 10,6 mg/l
Safety data sheet  
According to Annex II to REACH – Regulation 2015/830

K-FLEX SPECIAL THINNER

Normal value in marine water  21  mg/l
Normal value for fresh water sediment  30.4  mg/kg
Normal value for marine water sediment  3.04  mg/kg
Normal value of STP microorganisms  100  mg/l
Normal value for the terrestrial compartment  33.3  mg/kg

Health – Derived no-effect level - DNEL / DMEL

<table>
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<tr>
<th>Route of exposure</th>
<th>Effects on consumers</th>
<th>Effects on workers</th>
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HEPTANE
Threshold limit value

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Health – Derived no-effect level - DNEL / DMEL

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<th>Route of exposure</th>
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<th>Effects on workers</th>
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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.

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 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, 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.
Safety data sheet
According to Annex II to REACH – Regulation 2015/830

K-FLEX SPECIAL THINNER

Appearance   liquid
Colour   transparent
Odour   characteristic of solvent
Odour threshold. Not available.
pH. Not available.
Melting point / freezing point. Not available.
Initial boiling point. 55 °C.
Boiling range. Not available.
Flash point. -18 °C.
Evaporation Rate Not available.
Flammability of solids and gases Not available.
Lower inflammability limit. 1,2 % (V/V).
Upper inflammability limit. 13 % (V/V).
Lower explosive limit. Not available.
Upper explosive limit. Not available.
Vapour pressure. 127,05 mmHg
Vapour density Not available.
Relative density. 0,75
Solubility immiscible with 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.
Molecular weight. 76,094
VOC (Directive 1999/13/EC) : 100,00 % - 750,00 g/litre.
VOC (volatile carbon) : 60,69 % - 455,15 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.
ETHYL ACETATE: decomposes slowly into acetic acid and ethanol under the effect of light, air and water.
ACETONE: decomposes under the effect of heat.

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.
ETHYL ACETATE: risk of explosion on contact with: metals, alkalis, hydrides, oleum. May react violently with: fluoride, strong oxidising agents, chlorosulfuric acid, potassium tert-butoxide. Forms explosive mixtures with: air.

ACETONE: risk of explosion on contact with: bromine trifluoride, difluoro dioxide, hydrogen peroxide, nitrosyl chloride, 2-methyl-1,3 butadiene, nitromethane, nitrosyl perchlorate. May react dangerously with: potassium tert-butoxide, alkaline hydroxides, bromine, bromoform, isoprene, sodium, sulphur dioxide, chromium trioxide, chromyl chloride, nitric acid, chloroform, peroxymonosulphuric acid, phosphoryl chloride, chromousphuric acid, fluorine, strong oxidising agents. Develops flammable gas on contact with: nitrosyl perchlorate.

10.4 Conditions to avoid
Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.
ETHYL ACETATE: avoid exposure to light, sources of heat and naked flames.
ACETONE: avoid exposure to sources of heat, naked flames.

10.5 Incompatible materials:
ACETONE: Incompatible with: acids, oxidising 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.
ACETONE: may develop: ketenes, irritant substances.

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
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:
Not classified (no significant component)
LD50 (Oral) of the mixture:
Not classified (no significant component)
LD50 (Dermal) of the mixture:
Not classified (no significant component)
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HEPTANE
LD50 (Oral) > 8 mg/kg bw Ratto
LD50 (Dermal) > 20000 mg/kg-bw Coniglio LC50 (Inhalation) > 23,3 mg/l/4h Ratto

ACETONE
LD50 (Oral) 5800 mg/kg ratto LD50 (Dermal) > 20 ml/kg coniglio
LC50 (Inhalation) 21,09 ppm/8h ratto

ETHYL ACETATE
LD50 (Oral) 4934 mg/kg dw ratto
LD50 (Dermal) > 20000 mg/kg-bw coniglio

SKIN CORROSION / IRRITATION
Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE / IRRITATION
Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION
Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY
Does not meet the classification criteria for this hazard class

CARCINOGENICITY
Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY
Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE
May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE
Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD
Does not meet the classification criteria for this hazard class

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 aquatic environment.

12.1. Toxicity
HEPTANE
LC50 - for Fish > 13,4 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea 3,2 mg/l/48h Daphnia magna

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Page n. 11 of 17
<table>
<thead>
<tr>
<th>Substance</th>
<th>EC50/Fish/LC50</th>
<th>NOEC/Crustacea</th>
<th>NOEC/Algae/Aquatic Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>8120 mg/l/96h Pimephales promelas</td>
<td>2,4 mg/l Daphnia pulex</td>
<td>&gt; 100 mg/l Scenedesmus subspicatus</td>
</tr>
<tr>
<td>Ethyl Acetate</td>
<td>230 mg/l/96h Pimephales promelas</td>
<td>165 mg/l/48h Daphnia magna</td>
<td>2,4 mg/l Daphnia pulex</td>
</tr>
<tr>
<td>Heptane</td>
<td>0,1 - 100 mg/l</td>
<td>&gt; 10000 mg/l</td>
<td>552</td>
</tr>
</tbody>
</table>

### 12.2 Persistence and degradability

The paraffinic hydrocarbons fraction may be considered biodegradable in water and in air. They distribute mostly in the air. They distribute mostly in the air. The small non biodegradable amount which spreads into water tends to accumulate in fish.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Solubility in water</th>
<th>BCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>Rapidly degradable</td>
<td>3</td>
</tr>
<tr>
<td>Ethyl Acetate</td>
<td>Solubility in water</td>
<td>10000 mg/l</td>
</tr>
<tr>
<td>Heptane</td>
<td>Solubility in water</td>
<td>552</td>
</tr>
</tbody>
</table>

### 12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Partition coefficient: n-octanol/water</th>
<th>BCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane</td>
<td>4,5</td>
<td>552</td>
</tr>
<tr>
<td>Acetone</td>
<td>-0,23</td>
<td>3</td>
</tr>
</tbody>
</table>

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12.4 Mobility in soil

**HEPTANE**
Partition coefficient: soil/water 2.38

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: 1993

14.2 UN proper shipping name
ADR/RID: FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE; ACETONE)
IMDG: FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE; ACETONE; HEPTANE)
IATA: FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE; ACETONE)

14.3 Transport hazard class(es)

<table>
<thead>
<tr>
<th>ADR/RID:</th>
<th>Class: 3</th>
<th>Label: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG:</td>
<td>Class: 3</td>
<td>Label: 3</td>
</tr>
<tr>
<td>IATA:</td>
<td>Class: 3</td>
<td>Label: 3</td>
</tr>
</tbody>
</table>
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:33 Limited Quantities: 1L Tunnel restriction code: (D/E)
Special Provision: 640C
IMDG: EMS: F-E, S-E Limited Quantities: 1L
IATA: Cargo: Maximum quantity: 60L Packaging instructions: 364
Pass: Maximum quantity: 5L Packaging instructions: 353
Special Instructions: A3

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.

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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.

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

SECTION 16: Other information
Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2  Flammable liquid, category 2
Asp. Tox. 1  Aspiration hazard, 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
Aquatic Acute 1  Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1  Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2  Hazardous to the aquatic environment, chronic toxicity, category 2
H225  Highly flammable liquid and vapour.
H304  May be fatal if swallowed and enters airways.
H319  Causes serious eye irritation.
H315  Causes skin irritation.
H336  May cause drowsiness or dizziness.
H400  Very toxic to aquatic life.
H410  Very toxic to aquatic life with long lasting effects.
H411  Toxic to aquatic life with long lasting effects.
EUE066  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%
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-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. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
15. Regulation (EU) 2018/1480 (XII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità)
- Italy Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
Safety data sheet
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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.

Product’s classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12. The data for evaluation of chemical-physical properties are reported in section 9.