# Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

**1.1. Product identifier**

Product name **EPOSOLV**

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

Intended use **Acidic cleaner for epoxy resin and grout removal**

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

Name **BEL CHIMICA S.r.l.**
Full address **Via San Michele, 35**
District and Country **51031 Agliana (PT)**
**ITALIA**

**Tel. +39 (0574) 750365**

**Fax +39 (0574) 751288**

e-mail address of the competent person

responsible for the Safety Data Sheet **sergio.stella@geal-chim.it**
Product distribution by: **Bel Chimica S.r.l.**

**1.4. Emergency telephone number**

For urgent inquiries refer to: **Aristocrat's Marble & Granite Pty Ltd**
**Exclusive Australian Agent for GEAL SYSTEMS.**
**P.O Box 946, Templestowe, Vic, 3106.**
**PH: 03 94311813**
**Mob: 0411410260**
**Website: http://www.aristocratsgealaus.com.au**
**e-mail: info@aristocratsgealaus.com.au**

## SECTION 2. Hazards identification

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

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

| | | |
|---|---|---|
| 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 2 | H371 | May cause damage to organs. |

**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:

| | |
|---|---|
| **H314** | Causes severe skin burns and eye damage. |
| **H371** | May cause damage to organs. |
| **EUH071** | Corrosive to the respiratory tract. |

Precautionary statements:

| | |
|---|---|
| **P102** | Keep out of reach of children. |
| **P101** | If medical advice is needed, have product container or label at hand. |
| **P280** | Wear protective gloves/ protective clothing / eye protection / face protection. |
| **P310** | Immediately call a POISON CENTER / doctor / . . . |

**Contains:** GLYCOLIC ACID
FORMIC ACID

**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)** |
|---|---|---|
| **BENZYL ALCOHOL** | | |
| CAS 100-51-6 | 19 ≤ x < 24 | Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319 |
| EC 202-859-9 | | |
| INDEX 603-057-00-5 | | |
| Reg. no. 01-2119492630-38 | | |
| **1-METHOXY-2-PROPANOL** | | |
| CAS 107-98-2 | 14 ≤ x < 19 | Flam. Liq. 3 H226, STOT SE 3 H336 |

EC 203-539-1
INDEX 603-064-00-3
Reg. no. 01-2119457435-35

**GLYCOLIC ACID**

CAS 79-14-1 — 9 ≤ x < 14 — Met. Corr. 1 H290, Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318
EC 201-180-5
INDEX -
Reg. no. 01-2119485579-17-0002

**FORMIC ACID**

CAS 64-18-6 — 1 ≤ x < 2 — Flam. Liq. 3 H226, Acute Tox. 3 H331, STOT SE 1 H370, Acute Tox. 4 H302, Skin Corr. 1A H314, Eye Dam. 1 H318, EUH071, Classification note according to Annex VI to the CLP Regulation: B
EC 200-579-1
INDEX 607-001-00-0
Reg. no. 01-2119491174-37

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
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

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. 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:

| | | |
|---|---|---|
| DEU | Deutschland | TRGS 900 (Fassung 07.06.2018) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte |
| ESP | España | LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2008 NIPO: 211-08-011-5 |
| FRA | France | Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Third edition,published 2018) |
| ITA | Italia | DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017 |
| POL | Polska | ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 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, 1.ª série - N.º 111 - 11 de junho de 2018 |
| 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 2019 |

**BENZYL ALCOHOL**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | | |
|---|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | | |
| AGW | DEU | 22 | 5 | 44 | 10 | SKIN | 11 |
| NDS/NDSCh | POL | 240 | | | | | |

**1-METHOXY-2-PROPANOL**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 370 | 100 | 740 | 200 | |
| MAK | DEU | 370 | 100 | 740 | 200 | |
| VLA | ESP | 375 | 100 | 568 | 150 | SKIN |
| VLEP | FRA | 188 | 50 | 375 | 10 | SKIN |
| WEL | GBR | 375 | 100 | 560 | 150 | SKIN |
| VLEP | ITA | 375 | 100 | 568 | 150 | SKIN |
| NDS/NDSCh | POL | 180 | | 360 | | SKIN |
| VLE | PRT | 375 | 100 | 568 | 150 | |
| OEL | EU | 375 | 100 | 568 | 150 | SKIN |
| TLV-ACGIH | | 184 | 50 | 368 | 100 | |

**FORMIC ACID**

**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|---|---|---|---|---|---|---|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 9,5 | 5 | 19 | 10 | |
| MAK | DEU | 9,5 | 5 | 19 | 10 | |
| VLA | ESP | 9 | 5 | | | |
| VLEP | FRA | 9 | 5 | | | |

| | | | | | |
|---|---|---|---|---|---|
| WEL | GBR | 9,6 | 5 | | |
| VLEP | ITA | 9 | 5 | | |
| NDS/NDSCh | POL | 5 | | 15 | |
| VLE | PRT | 9 | 5 | | |
| OEL | EU | 9 | 5 | | |
| TLV-ACGIH | | 9,4 | 5 | 18,8 | 10 |

Legend:

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

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

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.

## SECTION 9. Physical and chemical properties

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

| | |
|---|---|
| Appearance | pasty liquid |
| Colour | Pale yellow |
| Odour | characteristic |
| Odour threshold | Not available |
| pH | 2,5 |
| Melting point / freezing point | Not available |
| Initial boiling point | Not available |
| Boiling range | Not available |
| Flash point | Not available |
| 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 | 1,03 |
| Solubility | soluble 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**

| | | | | |
|---|---|---|---|---|
| Total solids (250°C / 482°F) | 14,73 % | | | |
| VOC (Directive 2010/75/EC) : | 36,73 % | - | 378,34 | g/litre |
| VOC (volatile carbon) : | 23,98 % | - | 246,97 | 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.

BENZYL ALCOHOL

Decomposes at temperatures above 870°C/1598°F.Possibility of explosion.

1-METHOXY-2-PROPANOL

Dissolves various plastic materials.Stable in normal conditions of use and storage.

Absorbs and disolves in water and in organic solvents. With air it may slowly form explosive peroxides.

FORMIC ACID

Decomposes under the effect of heat.Attacks various types of plastic materials.

At room temperature it can release carbon monoxide.

**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.

BENZYL ALCOHOL

May react dangerously with: hydrobromic acid,iron,oxidising agents,sulphuric acid.Risk of explosion on contact with: phosphorus trichloride.

1-METHOXY-2-PROPANOL

May react dangerously with: strong oxidising agents,strong acids.

FORMIC ACID

Risk of explosion on contact with: sodium hypochlorite,nitromethane,hydrogen peroxide,furfuryl alcohol.May react dangerously with: alkaline hydroxides,alkaline earth hydroxides,aluminium,palladium-carbon,oxidising agents,phosphorus pentoxide,nitric acid,concentrated sulphuric acid,trihydrate thallium trinitrate.May react dangerously if exposed to: heat.Forms explosive mixtures with: air.

**10.4. Conditions to avoid**

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

BENZYL ALCOHOL

Avoid exposure to: air,sources of heat,naked flames.

1-METHOXY-2-PROPANOL

Avoid exposure to: air.

FORMIC ACID

Avoid exposure to: light,sources of heat,naked flames.

**10.5. Incompatible materials**

BENZYL ALCOHOL

Incompatible with: sulphuric acid,oxidising substances,aluminium.

1-METHOXY-2-PROPANOL

Incompatible with: oxidising substances,strong acids,alkaline metals.

FORMIC ACID

Incompatible with: strong oxidants,strong bases,sulphuric acid,furfurylic acid.

**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.

FORMIC ACID

May develop: carbon monoxide,hydrogen.

## SECTION 11. Toxicological information

**11.1. Information on toxicological effects**

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

1-METHOXY-2-PROPANOL

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

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

1-METHOXY-2-PROPANOL

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product. Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported.

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation - mists / powders) of the mixture:
> 5 mg/l
LC50 (Inhalation - vapours) of the mixture:
> 20 mg/l

LD50 (Oral) of the mixture:
>2000 mg/kg
LD50 (Dermal) of the mixture:
Not classified (no significant component)

Corrosive to the respiratory tract.

GLYCOLIC ACID

LD50 (Oral) 1950 mg/kg Rat

LC50 (Inhalation) 7,1 mg/l/4h Rat

BENZYL ALCOHOL

LD50 (Oral) 1230 mg/kg Rat

LD50 (Dermal) 2000 mg/kg Rabbit

LC50 (Inhalation) > 4,1 mg/l/4h Rat

1-METHOXY-2-PROPANOL

LD50 (Oral) 5300 mg/kg Rat

LD50 (Dermal) 13000 mg/kg Rabbit

LC50 (Inhalation) 54,6 mg/l/4h Rat

FORMIC ACID

LD50 (Oral) 730 mg/kg ratto

LC50 (Inhalation) 7,85 mg/l/4h

SKIN CORROSION / IRRITATION

Corrosive for the skin

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

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 damage to organs

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

**12.1. Toxicity**

Information not available

**12.2. Persistence and degradability**

GLYCOLIC ACID
Solubility in water > 10000 mg/l
Rapidly degradable

BENZYL ALCOHOL
Rapidly degradable

1-METHOXY-2-PROPANOL
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

FORMIC ACID
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

**12.3. Bioaccumulative potential**

GLYCOLIC ACID
Partition coefficient: n-octanol/water < 0,3

BENZYL ALCOHOL
Partition coefficient: n-octanol/water 1,1

1-METHOXY-2-PROPANOL
Partition coefficient: n-octanol/water < 1

FORMIC ACID
Partition coefficient: n-octanol/water -2,1

**12.4. Mobility in soil**

GLYCOLIC ACID
Partition coefficient: soil/water < 1,4

FORMIC ACID
Partition coefficient: soil/water < 1,25

**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: 3265

**14.2. UN proper shipping name**

| | |
|---|---|
| ADR / RID: | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID) |
| IMDG: | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID) |
| IATA: | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID) |

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

| | | |
|---|---|---|
| ADR / RID: | Class: 8 | Label: 8 |
| IMDG: | Class: 8 | Label: 8 |
| IATA: | Class: 8 | Label: 8 |

**14.4. Packing group**

| | |
|---|---|
| ADR / RID, IMDG, IATA: | III |

**14.5. Environmental hazards**

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

**14.6. Special precautions for user**

| | | | |
|---|---|---|---|
| ADR / RID: | HIN - Kemler: 80 | Limited Quantities: 5 L | Tunnel restriction code: (E) |
| | Special Provision: - | | |
| IMDG: | EMS: F-A, S-B | Limited Quantities: 5 L | |
| IATA: | Cargo: | Maximum quantity: 60 L | Packaging instructions: 856 |
| | Pass.: | Maximum quantity: 5 L | Packaging instructions: 852 |
| | Special Instructions: | A3, A803 | |

**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: None

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)

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

BENZYL ALCOHOL

1-METHOXY-2-PROPANOL

FORMIC ACID

GLYCOLIC ACID

## SECTION 16. Other information

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

| | |
|---|---|
| **Flam. Liq. 3** | Flammable liquid, category 3 |
| **Met. Corr. 1** | Substance or mixture corrosive to metals, category 1 |
| **Acute Tox. 3** | Acute toxicity, category 3 |
| **STOT SE 1** | Specific target organ toxicity - single exposure, category 1 |
| **Acute Tox. 4** | Acute toxicity, category 4 |
| **Skin Corr. 1A** | Skin corrosion, category 1A |
| **Skin Corr. 1B** | Skin corrosion, category 1B |
| **Eye Dam. 1** | Serious eye damage, category 1 |
| **Eye Irrit. 2** | Eye irritation, category 2 |
| **STOT SE 3** | Specific target organ toxicity - single exposure, category 3 |
| **STOT SE 2** | Specific target organ toxicity - single exposure, category 2 |
| **H226** | Flammable liquid and vapour. |
| **H290** | May be corrosive to metals. |
| **H331** | Toxic if inhaled. |
| **H370** | Causes damage to organs. |
| **H302** | Harmful if swallowed. |
| **H332** | Harmful if inhaled. |
| **H314** | Causes severe skin burns and eye damage. |
| **H318** | Causes serious eye damage. |
| **H319** | Causes serious eye irritation. |
| **H336** | May cause drowsiness or dizziness. |
| **H371** | May cause damage to organs. |
| **EUH071** | Corrosive to the respiratory tract. |

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. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:
The following sections were modified:
02 / 03 / 09 / 11 / 12 / 15.