

# Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878

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

### 1.1. Product identifier

Code: **0470075P**  
Product name: **EPOMALTA LC COMP.A**  
UFI: **52W0-F06X-J000-YHNY**

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

Intended use: **Three-component pourable epoxy mortar for structural reconstructions**

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

Name: **AZICHEM SRL**  
Full address: **Via G. Gentile 16/A**  
District and Country: **46044 Goito (Mantova) Italia**  
Tel.: **0376604185**  
e-mail address of the competent person responsible for the Safety Data Sheet: **laboratorio@azichem.com**

### 1.4. Emergency telephone number

For urgent inquiries refer to:  
**Osp. Pediatrico Bambino Gesù ROMA: 06 68593726**  
**Az. Osp. Univ. Foggia FOGGIA: 800183459**  
**Az. Osp. "A. Cardarelli" NAPOLI: 081-5453333**  
**Policlinico "Umberto I" ROMA: 06-49978000**  
**Policlinico "A. Gemelli" ROMA: 06-3054343**  
**Az. Osp. "Careggi" U.O. Tossicologia Medica FIRENZE: 055-7947819**  
**Centro Nazionale di Informazione Tossicologica PAVIA: 0382-24444**  
**Osp. Niguarda Ca' Granda MILANO: 02-66101029**  
**Azienda Ospedaliera Papa Giovanni XXII BERGAMO: 800883300**  
**Azienda Ospedaliera Integrata VERONA: 800011858**

## 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 2020/878.

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:

|                                                                    |       |                                                  |
|--------------------------------------------------------------------|-------|--------------------------------------------------|
| Reproductive toxicity, category 1B                                 | H360F | May damage fertility.                            |
| Eye irritation, category 2                                         | H319  | Causes serious eye irritation.                   |
| Skin irritation, category 2                                        | H315  | Causes skin irritation.                          |
| Skin sensitization, category 1                                     | H317  | May cause an allergic skin reaction.             |
| 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:



## SECTION 2. Hazards identification ... / >>

Signal words: Danger

Hazard statements:

**H360F** May damage fertility.  
**H319** Causes serious eye irritation.  
**H315** Causes skin irritation.  
**H317** May cause an allergic skin reaction.  
**H411** Toxic to aquatic life with long lasting effects.  
**EUH205** Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

**P201** Obtain special instructions before use.  
**P280** Wear protective gloves/ protective clothing / eye protection / face protection.  
**P308+P313** IF exposed or concerned: Get medical advice / attention.  
**P273** Avoid release to the environment.  
**P391** Collect spillage.  
**P261** Avoid breathing dust / fume / gas / mist / vapours / spray.

**Contains:** OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES  
FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND  
PENOL  
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

### 2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients

### 3.2. Mixtures

Contains:

| Identification                                                                             | x = Conc. %            | Classification (EC) 1272/2008 (CLP)                                                                                                           |
|--------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)</b>                                      |                        |                                                                                                                                               |
| INDEX 603-074-00-8                                                                         | $54 \leq x < 58$       | Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411                                                              |
| EC 500-033-5                                                                               |                        | Skin Irrit. 2 H315: $\geq 5\%$ , Eye Irrit. 2 H319: $\geq 5\%$                                                                                |
| CAS 25068-38-6                                                                             |                        |                                                                                                                                               |
| <b>OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES</b>                                 |                        |                                                                                                                                               |
| INDEX 603-103-00-4                                                                         | $19,5 \leq x < 21$     | Repr. 1B H360F, Skin Irrit. 2 H315, Skin Sens. 1 H317                                                                                         |
| EC 271-846-8                                                                               |                        |                                                                                                                                               |
| CAS 68609-97-2                                                                             |                        |                                                                                                                                               |
| REACH Reg. 01-21194852289-22-xxxx                                                          |                        |                                                                                                                                               |
| <b>FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PENOL</b> |                        |                                                                                                                                               |
| INDEX                                                                                      | $18 \leq x < 19,5$     | Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411                                                                                 |
| EC 500-006-8                                                                               |                        |                                                                                                                                               |
| CAS 9003-36-5                                                                              |                        |                                                                                                                                               |
| REACH Reg. 01-2119454392-40-XXXX                                                           |                        |                                                                                                                                               |
| <b>PROPYLENE CARBONATE</b>                                                                 |                        |                                                                                                                                               |
| INDEX 607-194-00-1                                                                         | $4 \leq x < 4,5$       | Eye Irrit. 2 H319                                                                                                                             |
| EC 203-572-1                                                                               |                        |                                                                                                                                               |
| CAS 108-32-7                                                                               |                        |                                                                                                                                               |
| REACH Reg. 01-2119537232-48-xxxx                                                           |                        |                                                                                                                                               |
| <b>PHOSPHORIC ACID</b>                                                                     |                        |                                                                                                                                               |
| INDEX 015-011-00-6                                                                         | $0,354 \leq x < 0,404$ | Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Classification note according to Annex VI to the CLP Regulation: B |
| EC 231-633-2                                                                               |                        | Met. Corr. 1 H290: $\geq 20\%$ , Skin Corr. 1B H314: $\geq 25\%$ , Skin Irrit. 2 H315: $\geq 10\%$                                            |
| CAS 7664-38-2                                                                              |                        | - < 25%, Eye Dam. 1 H318: $\geq 25\%$ , Eye Irrit. 2 H319: $\geq 10\%$ - < 25%<br>LD50 Oral: 1530 mg/kg                                       |

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

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

**EYES:** Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.

**INGESTION:** Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

**INHALATION:** Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

#### Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

### 4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

**DELAYED EFFECTS:** Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

### 4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned: Get medical advice / attention.

#### Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

## 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.

#### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

NOT SUITABLE: strong jets of water.

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

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

#### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

In case of fire, the following may be released: carbon monoxide. Carbon dioxide (CO<sub>2</sub>) Hydrogen chloride (HCl)

### 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

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

### 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. 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:

|     |              |                                                                                                                                                                                                                                                                                                                                                        |
|-----|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BGR | България     | НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.28 от 2 Април 2024г.)                                                                                                                                                                                          |
| DEU | Deutschland  | WirkungDosisNOAELMAK-und BAT-Werte-Liste 2024 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe                                                                                                                                                                                                                               |
| ESP | España       | Límites de exposición profesional para agentes químicos en España 2024                                                                                                                                                                                                                                                                                 |
| FRA | France       | Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021                                                                                                                                                                                                                                     |
| GRC | Ελλάδα       | Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία"» |
| HUN | Magyarország | Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről                                                                                                                                                                    |
| ITA | Italia       | Decreto Legislativo 9 Aprile 2008, n.81                                                                                                                                                                                                                                                                                                                |
| PRT | Portugal     | Decreto-Lei n.º 102/2024, de 4 de dezembro. Sumário: Transpõe para a ordem jurídica interna a Diretiva (UE) 2022/431, relativa à proteção dos trabalhadores contra riscos ligados à exposição a agentes cancerígenos ou mutagénicos e procede à quarta alteração                                                                                       |
| POL | Polska       | ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 24 czerwca 2024 r. zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy                                                                                                                           |

## SECTION 8. Exposure controls/personal protection ... / >>

|     |                |                                                                                                                                                                                                                                                                                            |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ROU | România        | HOTĂRÂRE nr. 179 din 28 februarie 2024 pentru modificarea și completarea Hotărârii Guvernului nr. 1.093/2006 privind stabilirea cerințelor minime de securitate și sănătate pentru protecția lucrătorilor împotriva riscurilor legate de expunerea la agenți ca                            |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020)                                                                                                                                                                                                                                  |
| EU  | OEL EU         | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; 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 98/24/EC; Directive 91/322/EEC. |
|     | ACGIH          | ACGIH 2025                                                                                                                                                                                                                                                                                 |

### PHOSPHORIC ACID

#### Threshold Limit Value

| Type      | Country | TWA/8h<br>mg/m3 | ppm | STEL/15min<br>mg/m3 | ppm | Remarks / Observations |
|-----------|---------|-----------------|-----|---------------------|-----|------------------------|
| TLV       | BGR     | 1               |     | 2                   |     |                        |
| AGW       | DEU     | 2               |     | 4                   |     | INHAL                  |
| MAK       | DEU     | 2               |     | 4                   |     | INHAL                  |
| VLA       | ESP     | 1               |     | 2                   |     |                        |
| VLEP      | FRA     | 1               | 0,2 | 2                   | 0,5 |                        |
| TLV       | GRC     | 1               |     | 3                   |     |                        |
| AK        | HUN     | 1               |     | 2                   |     |                        |
| VLEP      | ITA     | 1               |     | 2                   |     |                        |
| VLE       | PRT     | 1               |     | 2                   |     |                        |
| NDS/NDSch | POL     | 1               |     | 2                   |     |                        |
| TLV       | ROU     | 1               |     | 2                   |     |                        |
| WEL       | GBR     | 1               |     | 2                   |     |                        |
| OEL       | EU      | 1               |     | 2                   |     |                        |
| ACGIH     |         | 1               |     | 3                   |     |                        |

### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

#### Predicted no-effect concentration - PNEC

|                                                     |        |         |
|-----------------------------------------------------|--------|---------|
| Normal value in fresh water                         | 0,106  | mg/l    |
| Normal value in marine water                        | 0,011  | mg/l    |
| Normal value for fresh water sediment               | 307,16 | mg/kg/d |
| Normal value for marine water sediment              | 30,72  | mg/kg/d |
| Normal value for marine water, intermittent release | 0,072  | mg/l    |
| Normal value of STP microorganisms                  | 10     | mg/l    |
| Normal value for the terrestrial compartment        | 1,234  | 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              |                      |                |               | 0,5<br>mg/kg bw/d  |             |                |               |                    |
| Inhalation        | MED                  |                | MED           | 0,87<br>mg/m3      | MED         |                | MED           | 3,6<br>mg/m3       |
| Skin              | MED                  |                | MED           | 0,5<br>mg/kg bw/d  | MED         |                | MED           | 1<br>mg/kg<br>bw/d |

## SECTION 8. Exposure controls/personal protection ... / >>

### PROPYLENE CARBONATE

#### Threshold Limit Value

| Type | Country | TWA/8h | STEL/15min | Remarks / Observations |
|------|---------|--------|------------|------------------------|
|      |         | mg/m3  | ppm        |                        |
| AGW  | DEU     | 8,5    | 2          | INHAL                  |
| MAK  | DEU     | 8,5    | 2          | INHAL                  |

#### Predicted no-effect concentration - PNEC

|                                              |      |         |
|----------------------------------------------|------|---------|
| Normal value in fresh water                  | 0,9  | mg/l    |
| Normal value in marine water                 | 0,09 | mg/l    |
| Normal value of STP microorganisms           | 7400 | mg/l    |
| Normal value for the terrestrial compartment | 0,81 | 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        |
| Oral              |                      |                |                    | 10<br>mg/kg bw/d |             |                |                      |
| Inhalation        |                      |                | 10<br>mg/m3        | 17,4<br>mg/m3    |             |                | 20<br>mg/m3          |
| Skin              |                      |                |                    | 10<br>mg/kg bw/d |             |                | 20<br>mg/cm2<br>bw/d |

#### 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 ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

### 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.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, permeability time. 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 ISO 16321).

#### RESPIRATORY PROTECTION

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. 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).

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

| Properties                     | Value         | Information |
|--------------------------------|---------------|-------------|
| Appearance                     | liquid        |             |
| Colour                         | orange        |             |
| Odour                          | odourless     |             |
| Melting point / freezing point | not available |             |
| Initial boiling point          | not available |             |
| Flammability                   |               |             |

## SECTION 9. Physical and chemical properties ... / >>

|                                        |                             |
|----------------------------------------|-----------------------------|
| Lower explosive limit                  | not available               |
| Upper explosive limit                  | not available               |
| Flash point                            | > 60 °C                     |
| Auto-ignition temperature              | 460 °C                      |
| Decomposition temperature              | not available               |
| pH                                     | 7                           |
| Kinematic viscosity                    | not available               |
| Solubility                             | soluble in organic solvents |
| Partition coefficient: n-octanol/water | not available               |
| Vapour pressure                        | not available               |
| Density and/or relative density        | 1,2 g/cm3                   |
| Relative vapour density                | not available               |
| Particle characteristics               | not applicable              |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Information not available

#### 9.2.2. Other safety characteristics

Information not available

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

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

#### PHOSPHORIC ACID

Decomposes at temperatures above 200°C/392°F.

### 10.2. Chemical stability

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

#### PROPYLENE CARBONATE

The substance is hygroscopic.

### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

#### PHOSPHORIC ACID

Risk of explosion on contact with: nitromethane. May react dangerously with: alkalis, sodium borohydride.

#### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

Reacts violently in contact with amines and acids.

### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

#### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

Avoid heat.

#### FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PENOL

Heat, flames and sparks

### 10.5. Incompatible materials

#### PHOSPHORIC ACID

Incompatible with: metals, strong alkalis, aldehydes, organic sulphides, peroxides.



## SECTION 10. Stability and reactivity ... / >>

### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

Acids, alkalis, oxidizing agents and amines.

### PROPYLENE CARBONATE

Strong acids, strong bases, strong oxidizing agents.

## 10.6. Hazardous decomposition products

### PHOSPHORIC ACID

May develop: phosphoryl oxides.

### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

Hazardous decomposition products: carbon monoxide and carbon dioxide

## SECTION 11. Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### 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

ATE (Inhalation) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

#### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

LD50 (Dermal):

4000 mg/kg Rabbit (report di studio (1980))

LD50 (Oral):

2680 mg/kg Rat (report di studio (1974))

Reference: study report (1974)

Reliability (Klimisch score): 2

Species: Rat (Sprague-Dawley; male)

Routes of exposure: oral

Results: LD50 = 2680 mg/kg

Reference: study report (1977)

Reliability (Klimisch score): 2

Species: rat

Routes of exposure: inhalation

Results: LC0 = 0.15 mg/l air/7h

Reference: study report (1980)

Reliability (Klimisch score): 2

Species: Rabbit (New Zealand White; male)

Routes of exposure: dermal

Results: LD50 = 4000 mg/kg

#### PROPYLENE CARBONATE

LD50 (Dermal):

> 2000 mg/kg

LD50 (Oral):

> 5000 mg/kg

Method: OECD 401

Reliability (Klimisch score): 1



**SECTION 11. Toxicological information ... / >>**

Species: Rat (Sprague-Dawley; Male/Female)

Routes of exposure: oral

Results: LD50 > 5000

Method: OECD 402

Reliability (Klimisch score): 1

Species: rabbit (New Zealand White; Male/Female)

Routes of exposure: dermal

Results: LD50 > 2000 mg/kg.

**PHOSPHORIC ACID**

LD50 (Dermal): 2740 mg/kg Rabbit

LD50 (Oral): 1530 mg/kg Rat

LC50 (Inhalation mists/powders): > 0,85 mg/l/1h Rat

**SKIN CORROSION / IRRITATION**

Causes skin irritation

**OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES**

Method: Equivalent or similar to EPA OTS 798.4470

Reliability (Klimisch score): 2

Species: rabbit (New Zealand White)

Routes of exposure: dermal

Results: irritation (Harmonized classification, Annex VI, Regulation 1272/2008)

**FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PENOL**

Based on available data, the substance is classified as skin irritant, cat.2

**PROPYLENE CARBONATE**

Method: equivalent or similar to OECD 404

Reliability (Klimisch score): 1

Species: rabbit (New Zealand White)

Routes of exposure: dermal

Results: non-irritating.

**SERIOUS EYE DAMAGE / IRRITATION**

Causes serious eye irritation

**OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES**

Based on the weight of evidence of available data, the substance is not classified for the hazard class of serious eye damage/eye irritation.

**PROPYLENE CARBONATE**

Method: OECD 405

Reliability (Klimisch score): 1

Species: rabbit (New Zealand White)

Routes of exposure: ocular

Results: irritating

**RESPIRATORY OR SKIN SENSITISATION**

Sensitising for the skin

**PROPYLENE CARBONATE**

Based on the weight of evidence of available data determined by expert judgment, the substance is not classified for the Respiratory or Skin Sensitization hazard class.

**Skin sensitization****OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES**

Method: OECD 406

Reliability (Klimisch score): 1

Species: guinea pig

Routes of exposure: dermal

**SECTION 11. Toxicological information ... / >>**

Results: irritant (Harmonized classification, Annex VI, Regulation 1272/2008)

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PENOL  
Based on available data, the substance is classified as a skin sensitiser.

**GERM CELL MUTAGENICITY**

Does not meet the classification criteria for this hazard class

OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

Method: OECD 476 - In vitro test

Reliability (Klimisch score): 1

Species: Chinese hamster (ovaries)

Results: negative with and without metabolic activation

Method: OECD 474

Reliability (Klimisch score): 1

Species: mouse (ICR; male/female)

Routes of exposure: intraperitoneal

Results: negative

PROPYLENE CARBONATE

Method: equivalent or similar to OECD 482 - In vitro test

Reliability (Klimisch score): 1

Species: rat F344 (hepatocytes)

Results: negative without metabolic activation

Method: equivalent or similar to OECD 474

Reliability (Klimisch score): 2

Species: Mouse (CD-1; Male/Female)

Routes of exposure: intraperitoneal

Results: negative.

**CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

Based on available data, the substance does not have carcinogenic effects and is therefore not classified in the relevant CLP hazard class.

PROPYLENE CARBONATE

Method: equivalent or similar to OECD 451

Reliability (Klimisch score): 2

Species: Rat (C3H/HeJ; Male)

Routes of exposure: dermal

Results: negative.

**REPRODUCTIVE TOXICITY**

May damage fertility

**Adverse effects on sexual function and fertility**

PROPYLENE CARBONATE

Method: NTP (RACB)

Reliability (Klimisch score): 2

Species: Mouse (CD-1; Male/Female)

Routes of exposure: oral

Results: negative NOAEL (P0, F1, F2): 10100 mg/kg body weight/day

**Adverse effects on development of the offspring**

OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

Method: equivalent or similar to OECD 414

Reliability (Klimisch score): 1

Species: rat (CrI:CD®(SD)BR)

Routes of exposure: dermal

Results: negative. NOAEL (development)= 200 mg/kg body weight/day; NOAEL (maternal)= 200 mg/kg body weight/day; NOAEL (malformations) = 200 mg/kg body weight/day

**SECTION 11. Toxicological information ... / >>****PROPYLENE CARBONATE**

Method: equivalent or similar to OECD 414

Reliability (Klimisch score): 1

Species: mouse (CD-1)

Routes of exposure: oral

Results: negative. NOAEL (development): 10400 mg/kg body weight/day; NOAEL (maternal): 52 mg/kg body weight/day.

**STOT - SINGLE EXPOSURE**

Does not meet the classification criteria for this hazard class

**OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES**

Based on available data, the substance does not present specific target organ toxicity effects for single exposure and is not classified under the relevant CLP hazard class.

**PROPYLENE CARBONATE**

Based on available data, the substance does not present specific target organ toxicity effects for single exposure and is not classified under the relevant CLP hazard class.

**STOT - REPEATED EXPOSURE**

Does not meet the classification criteria for this hazard class

**OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES**

Method: OECD 408

Reliability (Klimisch score): 1

Species: rat (Wistar; male/female)

Routes of exposure: oral

Results: negative. NOEL (male) = 100 mg/kg body weight/day; NOEL (female) = 300 mg/kg body weight/day

Method: OECD 411

Reliability (Klimisch score): 2

Species: rat (Fischer 344 Male/Female)

Routes of exposure: inhalation

Results: NOEL = 1 mg/kg body weight/day; LOEL: 10 mg/kg body weight/day

**PROPYLENE CARBONATE**

Method: equivalent or similar to OECD 408

Reliability (Klimisch score): 2

Species: Rat (Sprague-Dawley; Male/Female)

Routes of exposure: oral

Results: negative. NOAEL: &gt; 5000 mg/kg body weight/day

Method: equivalent or similar to OECD 413

Reliability (Klimisch score): 2

Species: rat (Fischer 344; Male/Female)

Routes of exposure: inhalation (aerosol)

NOAEC results (systemic): 1000 mg/m3; NOAEC (local): 100 mg/m3; LOAEC (local): 500 mg/m3

**ASPIRATION HAZARD**

Does not meet the classification criteria for this hazard class

**OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES**

There are no data available on the danger in case of aspiration.

**PROPYLENE CARBONATE**

There are no data available on the danger in case of aspiration.

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

**SECTION 12. Ecological information**

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it has negative effects on the aquatic environment.

## SECTION 12. Ecological information ... / >>

### 12.1. Toxicity

#### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

EC50 - for Crustacea 7,2 mg/l/48h  
Chronic NOEC for Fish 100 mg/l (4 days)  
Chronic NOEC for Algae / Aquatic Plants 500 mg/l (72h)  
LL50 - Fish: > 100 mg/l/96h, Oncorhynchus mykiss (OECD 203)  
EL50 - Crustaceans: 7.2 mg/l/48h, Daphnia magna (OECD 202)  
IC50- Algae and Aquatic Plants: 843.75 mg/l/72h, Pseudokirchneriella subcapitata (OECD 201)  
NOELR Chronic Crustaceans: Daphnia magna, 56 mg/l/21 days (OECD 211)  
Chronic NOEC Algae and Aquatic Plants: 500 mg/l/72h, Pseudokirchneriella subcapitata (OECD 201)

#### PROPYLENE CARBONATE

LC50 - for Fish > 1000 mg/l/96h Cyprinus carpio (EU C.1)  
EC50 - for Crustacea > 1000 mg/l/48h Daphnia magna (equivalente o similare a OECD 202)  
EC50 - for Algae / Aquatic Plants > 900 mg/l/72h Desmodesmus subspicatus (equivalente o similare a OECD 201)

### 12.2. Persistence and degradability

#### REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

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

#### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

Rapidly degradable 87% in 28 giorni (OECD 301 F)

#### PROPYLENE CARBONATE

Rapidly degradable 87,7% in 29 giorni (OECD 301 B)

#### PHOSPHORIC ACID

Solubility in water > 850000 mg/l  
Degradability: information not available

### 12.3. Bioaccumulative potential

#### REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

Partition coefficient: n-octanol/water > 2,918  
BCF 31

#### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

The bioaccumulation potential of the substance was calculated using US EPA EPISuite version 3.20 version 2.17 BCFWIN. Using two derived octanol/water coefficients, the bioaccumulation potential was calculated 160 - 263 (log 2.2 - 2.4).  
Bioaccumulation in the food chain is not expected

#### PROPYLENE CARBONATE

Partition coefficient: n-octanol/water -0,41 NLM, TOXNET, Hazardous Substance Databank (HSDB)

### 12.4. Mobility in soil

#### REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

Partition coefficient: soil/water 2,65

#### OXYRANE, MONO[(C12-14 -ALKYLOXY)METHYL] DERIVATIVES

Method: OECD 121  
Reliability (Klimisch score): 1  
KOC results: > 4.90  
The substance is absorbed by organic carbon in the soil and is therefore classified as immobile

### 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  $\geq$  than 0,1%.

## SECTION 12. Ecological information ... / >>

### 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

### 12.7. 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.

The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

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 or ID number

ADR / RID, IMDG, IATA: UN 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IATA dangerous goods regulations.

### 14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN); FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PENOL)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN); FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PENOL)

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN); FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PENOL)

### 14.3. Transport hazard class(es)

ADR / RID: Class: 9 Label: 9

IMDG: Class: 9 Label: 9

IATA: Class: 9 Label: 9



### 14.4. Packing group

ADR / RID, IMDG, IATA: III

## SECTION 14. Transport information ... / >>

### 14.5. Environmental hazards

ADR / RID: Environmentally Hazardous

IMDG: Marine Pollutant

IATA: Environmentally Hazardous



### 14.6. Special precautions for user

|            |                                       |                         |                              |
|------------|---------------------------------------|-------------------------|------------------------------|
| ADR / RID: | HIN - Kemler: 90                      | Limited Quantities: 5 L | Tunnel restriction code: (-) |
|            | Special provision: 274, 335, 375, 601 |                         |                              |
| IMDG:      | EMS: F-A, S-F                         | Limited Quantities: 5 L |                              |
| IATA:      | Cargo:                                | Maximum quantity: 450 L | Packaging instructions: 964  |
|            | Passengers:                           | Maximum quantity: 450 L | Packaging instructions: 964  |
|            | Special provision:                    | A97, A158, A197, A215   |                              |

### 14.7. Maritime transport in bulk according to IMO instruments

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/EU: E2

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

Product

Point 3

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors  
not applicable

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 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 not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

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

|                          |                                                                    |
|--------------------------|--------------------------------------------------------------------|
| <b>Met. Corr. 1</b>      | Substance or mixture corrosive to metals, category 1               |
| <b>Repr. 1B</b>          | Reproductive toxicity, category 1B                                 |
| <b>Acute Tox. 4</b>      | Acute toxicity, category 4                                         |
| <b>Skin Corr. 1B</b>     | Skin corrosion, category 1B                                        |
| <b>Skin Corr. 1C</b>     | Skin corrosion, category 1C                                        |
| <b>Skin Corr. 1</b>      | Skin corrosion, category 1                                         |
| <b>Eye Dam. 1</b>        | Serious eye damage, category 1                                     |
| <b>Eye Irrit. 2</b>      | Eye irritation, category 2                                         |
| <b>Skin Irrit. 2</b>     | Skin irritation, category 2                                        |
| <b>Skin Sens. 1</b>      | Skin sensitization, category 1                                     |
| <b>Aquatic Chronic 2</b> | Hazardous to the aquatic environment, chronic toxicity, category 2 |
| <b>H290</b>              | May be corrosive to metals.                                        |
| <b>H360F</b>             | May damage fertility.                                              |
| <b>H302</b>              | Harmful if swallowed.                                              |
| <b>H314</b>              | Causes severe skin burns and eye damage.                           |
| <b>H318</b>              | Causes serious eye damage.                                         |
| <b>H319</b>              | Causes serious eye irritation.                                     |
| <b>H315</b>              | Causes skin irritation.                                            |
| <b>H317</b>              | May cause an allergic skin reaction.                               |
| <b>H411</b>              | Toxic to aquatic life with long lasting effects.                   |
| <b>EUH205</b>            | Contains epoxy constituents. May produce an allergic reaction.     |

### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 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: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 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: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- 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) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) 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



**SECTION 16. Other information ... / >>**

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) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
23. Delegated Regulation (UE) 2023/707
24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
26. Delegated Regulation (UE) 2024/197 (XXI Atp. CLP)
27. Delegated Regulation (UE) 2024/2564 (XXII 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.

**CALCULATION METHODS FOR CLASSIFICATION**

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

**Changes to previous review:**

The following sections were modified:

02 / 03 / 04 / 09 / 11 / 12 / 13 / 14 / 16.