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

1.1 Product identifier

Identification of the substance: 2-Methyl-1-propanol
Article number: CP09
Registration number (REACH): 01-2119484609-23-xxxx
Index No: 603-108-00-1
EC number: 201-148-0
CAS number: 78-83-1

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

Identified uses: laboratory chemical

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0
Telefax: +49 (0) 721 - 56 06 149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

1.4 Emergency telephone number

Emergency information service: Poison Centre Munich: +49/(0)89 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

<table>
<thead>
<tr>
<th>Section</th>
<th>Hazard class</th>
<th>Hazard class and category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6</td>
<td>flammable liquid</td>
<td>(Flam. Liq. 3)</td>
<td>H226</td>
</tr>
<tr>
<td>3.2</td>
<td>skin corrosion/irritation</td>
<td>(Skin Irrit. 2)</td>
<td>H315</td>
</tr>
<tr>
<td>3.3</td>
<td>serious eye damage/eye irritation</td>
<td>(Eye Dam. 1)</td>
<td>H318</td>
</tr>
<tr>
<td>3.8R</td>
<td>specific target organ toxicity - single exposure (respiratory tract irritation)</td>
<td>(STOT SE 3)</td>
<td>H335</td>
</tr>
<tr>
<td>3.8D</td>
<td>specific target organ toxicity - single exposure (narcotic effects, drowsiness)</td>
<td>(STOT SE 3)</td>
<td>H336</td>
</tr>
</tbody>
</table>
For full text of Hazard- and EU Hazard-statements: see SECTION 16.

**2.2 Label elements**

**Labelling according to Regulation (EC) No 1272/2008 (CLP)**

**Signal word** Danger

**Pictograms**

![Pictogram](image)

**Hazard statements**

- H226   Flammable liquid and vapour.
- H315   Causes skin irritation.
- H318   Causes serious eye damage.
- H335   May cause respiratory irritation.
- H336   May cause drowsiness or dizziness.

**Precautionary statements**

**Precautionary statements - prevention**

- P210   Keep away from heat, hot surfaces, sparks, open flames. No smoking.
- P280   Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statements - response**

- P303+P361+P353   IF ON SKIN (or hair): take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338   IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312   Call a POISON CENTER/doctor if you feel unwell.

**Precautionary statements - storage**

- P403+P233   Store in a well-ventilated place. Keep container tightly closed.

**Labelling of packages where the contents do not exceed 125 ml**

**Signal word:** Danger

**Symbol(s)**

<table>
<thead>
<tr>
<th>Symbol(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
<tr>
<td>P305+P351+P338</td>
<td>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
</tbody>
</table>
There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>2-Methyl-1-propanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index No</td>
<td>603-108-00-1</td>
</tr>
<tr>
<td>Registration number (REACH)</td>
<td>01-2119484609-23-xxxx</td>
</tr>
<tr>
<td>EC number</td>
<td>201-148-0</td>
</tr>
<tr>
<td>CAS number</td>
<td>78-83-1</td>
</tr>
<tr>
<td>Molecular formula</td>
<td>C₄H₁₀O</td>
</tr>
<tr>
<td>Molar mass</td>
<td>74,12 g/mol</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes
Take off contaminated clothing.

Following inhalation
Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact
Rinse skin with water/shower. In case of skin irritation, consult a physician.

Following eye contact
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion
Rinse mouth. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed
Dizziness, Unconsciousness, Headache, Cough, Vomiting, Risk of blindness, Nausea, Risk of serious damage to eyes, Irritation

4.3 Indication of any immediate medical attention and special treatment needed
none
SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Co-ordinate fire-fighting measures to the fire surroundings
foam, alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO2)

Unsuitable extinguishing media
water jet

5.2 Special hazards arising from the substance or mixture

Combustible. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours can form explosive mixtures with air.

Hazardous combustion products
In case of fire may be liberated: carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Wearing of 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. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Explosive properties.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill
Covering of drains.

Advices on how to clean up a spill
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases
Place in appropriate containers for disposal. Ventilate affected area.

Reference to other sections
2-Methyl-1-propanol ≥99 %, for synthesis

article number: CP09

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Provision of sufficient ventilation. Provision of sufficient ventilation.

- Measures to prevent fire as well as aerosol and dust generation

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge.

Advice on general occupational hygiene
Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a cool place.

Incompatible substances or mixtures
Observe hints for combined storage.

Consideration of other advice
Ground/bond container and receiving equipment.

- Ventilation requirements
Use local and general ventilation.

- Specific designs for storage rooms or vessels
Recommended storage temperature: 15 - 25 °C.

7.3 Specific end use(s)
No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)
not relevant

Relevant DNELs/DMELs/PNECs and other threshold levels

- human health values

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Protection goal, route of exposure</th>
<th>Used in</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>310 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - local effects</td>
</tr>
</tbody>
</table>

- environmental values

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEC</td>
<td>0,4 mg/l</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>PNEC</td>
<td>0,04 mg/l</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>PNEC</td>
<td>10 mg/l</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>PNEC</td>
<td>1,52 mg/kg</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>PNEC</td>
<td>0,152 mg/kg</td>
<td>marine sediment</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>
**2-Methyl-1-propanol ≥99 %, for synthesis**

**article number: CP09**

### Exposure controls

**Individual protection measures (personal protective equipment)**

**Eye/face protection**
Use safety goggle with side protection.

**Skin protection**

- **hand protection**
  Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- **type of material**
  NBR (Nitrile rubber)

- **material thickness**
  0,7mm.

- **breakthrough times of the glove material**
  >480 minutes (permeation: level 6)

- **other protection measures**
  Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

**Respiratory protection**
Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C, colour code: Brown). Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

**Environmental exposure controls**
Keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid (fluid)</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>like: alcohol</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
</tbody>
</table>

---

**Endpoint**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEC</td>
<td>0,0699 mg/kg</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>PNEC</td>
<td>11 mg/l</td>
<td>water</td>
<td>continuous</td>
</tr>
</tbody>
</table>

---

**Endpoint**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>PNEC</td>
<td>11 mg/l</td>
<td>water</td>
<td>continuous</td>
</tr>
</tbody>
</table>
**Other physical and chemical parameters**

- **pH (value)**: 7 (water: 80 g/l, 20 °C)
- **Melting point/freezing point**: <-90 °C
- **Initial boiling point and boiling range**: 108 °C at 1.013 hPa
- **Flash point**: 31 °C at 1.013 hPa
- **Evaporation rate**: no data available
- **Flammability (solid, gas)**: not relevant (fluid)

**Explosive limits**
- **lower explosion limit (LEL)**: 1.5 vol%
- **upper explosion limit (UEL)**: 12 vol%

**Explosion limits of dust clouds**: not relevant

**Vapour pressure**: 12 hPa at 20 °C

**Density**: 0.803 g/cm³ at 20 °C

**Vapour density**: 2.56 air = 1

**Bulk density**: Not applicable

**Relative density**: Information on this property is not available.

**Solubility(ies)**
- **Water solubility**: 70 g/l at 20 °C

**Partition coefficient**
- **n-octanol/water (log KOW)**: 1 (pH value: 7, 25 °C) (ECHA)

**Auto-ignition temperature**: 400 °C - ECHA

**Decomposition temperature**: no data available

**Viscosity**
- **dynamic viscosity**: 3.95 mPa s at 20 °C
  0.52 mPa s at 100 °C

**Explosive properties**: none

**Oxidising properties**: none

**9.2 Other information**

- **Surface tension**: 69.7 mN/m (20 °C)
- **Refractive index**: 1.395
2-Methyl-1-propanol  ≥99 %, for synthesis

**SECTION 10: Stability and reactivity**

10.1 Reactivity
- risk of ignition. In case of warming: Vapours can form explosive mixtures with air.

10.2 Chemical stability
- The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions
- Exothermic reaction with: Reducing agents, Acid chlorides, inorganic,
- Dangerous/dangerous reactions with: Strong oxidiser, Aluminium,
- Violent reaction with: Alkali metals, Alkaline earth metal

10.4 Conditions to avoid
- Keep away from heat.

10.5 Incompatible materials
- different plastic and rubber, aluminium

10.6 Hazardous decomposition products
- Hazardous combustion products: see section 5.

**SECTION 11: Toxicological information**

11.1 Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>Exposure route</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>inhalation: vapour</td>
<td>LC50</td>
<td>24.6 mg/l/4h</td>
<td>rat</td>
<td>TOXNET</td>
</tr>
<tr>
<td>oral</td>
<td>LD50</td>
<td>2.460 mg/kg</td>
<td>rat</td>
<td>TOXNET</td>
</tr>
<tr>
<td>dermal</td>
<td>LD50</td>
<td>3.400 mg/kg</td>
<td>rabbit</td>
<td>TOXNET</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
- Causes skin irritation.

**Serious eye damage/eye irritation**
- Causes serious eye damage.

**Respiratory or skin sensitisation**
- Shall not be classified as a respiratory or skin sensitiser.

**Summary of evaluation of the CMR properties**
- Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant
  - **Specific target organ toxicity - single exposure**
    - May cause respiratory irritation. May cause drowsiness or dizziness.
  - **Specific target organ toxicity - repeated exposure**
    - Shall not be classified as a specific target organ toxicant (repeated exposure).
Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

- **If swallowed**
  Vomiting, nausea

- **If in eyes**
  Causes serious eye damage, risk of blindness

- **If inhaled**
  Data are not available

- **If on skin**
  Causes skin irritation, risk of absorption via the skin

Other information
Headache, Blood pressure drop, Narcosis, Vertigo, Dizziness

### SECTION 12: Ecological information

#### 12.1 Toxicity
acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

##### Aquatic toxicity (acute)

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Source</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>1.430 mg/l</td>
<td>fish</td>
<td>ECHA</td>
<td>96 hours</td>
</tr>
<tr>
<td>EC50</td>
<td>1.100 mg/l</td>
<td>aquatic invertebrates</td>
<td>ECHA</td>
<td>48 hours</td>
</tr>
<tr>
<td>ErC50</td>
<td>1.799 mg/l</td>
<td>algae</td>
<td>ECHA</td>
<td>72 hours</td>
</tr>
</tbody>
</table>

##### Aquatic toxicity (chronic)

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Source</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOEC</td>
<td>20 mg/l</td>
<td>aquatic invertebrates</td>
<td>ECHA</td>
<td>21 d</td>
</tr>
</tbody>
</table>

#### 12.2 Process of degradability

The substance is readily biodegradable.
Theoretical Oxygen Demand: 2.59 mg/mg
Theoretical Carbon Dioxide: 2.375 mg/mg
Biochemical Oxygen Demand: 1.79 g/g

<table>
<thead>
<tr>
<th>Process</th>
<th>Degradation rate</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>biotic/abiotic</td>
<td>99 %</td>
<td>14 d</td>
</tr>
<tr>
<td>oxygen depletion</td>
<td>70 - 80 %</td>
<td>28 d</td>
</tr>
</tbody>
</table>
2-Methyl-1-propanol ≥99 %, for synthesis

article number: CP09

12.3 **Bioaccumulative potential**
Does not significantly accumulate in organisms.

n-octanol/water (log KOW) 1 (pH value: 7, 25 °C)

12.4 **Mobility in soil**
Data are not available.

12.5 **Results of PBT and vPvB assessment**
Data are not available.

12.6 **Other adverse effects**
Slightly hazardous to water.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods
This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Sewage disposal-relevant information**
Do not empty into drains.

**Waste treatment of containers/packagings**
It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

#### 13.2 Relevant provisions relating to waste
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### 13.3 Remarks
Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

### SECTION 14: Transport information

14.1 **UN number** 1212
14.2 **UN proper shipping name** ISOBUTANOL
14.3 **Transport hazard class(es)**
Class 3 (flammable liquids)
14.4 **Packing group** III (substance presenting low danger)
14.5 **Environmental hazards** none (non-environmentally hazardous acc. to the dangerous goods regulations)

14.6 **Special precautions for user**
Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 **Transport in bulk according to Annex II of MARPOL and the IBC Code**
The cargo is not intended to be carried in bulk.
2-Methyl-1-propanol ≥99 %, for synthesis

article number: CP09

14.8 Information for each of the UN Model Regulations

• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

UN number 1212
Proper shipping name ISOBUTANOL
Particulars in the transport document UN1212, ISOBUTANOL, 3, III, (D/E)
Class 3
Classification code F1
Packing group III
Danger label(s) 3

{| Excluded quantities (EQ) | E1 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited quantities (LQ)</td>
<td>5 L</td>
</tr>
<tr>
<td>Transport category (TC)</td>
<td>3</td>
</tr>
<tr>
<td>Tunnel restriction code (TRC)</td>
<td>D/E</td>
</tr>
<tr>
<td>Hazard identification No</td>
<td>30</td>
</tr>
</tbody>
</table>

• International Maritime Dangerous Goods Code (IMDG)

UN number 1212
Proper shipping name ISOBUTANOL
Particulars in the shipper's declaration UN1212, ISOBUTANOL, 3, III, 31°C c.c.
Class 3
Packing group III
Danger label(s) 3

<table>
<thead>
<tr>
<th>Special provisions (SP)</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excluded quantities (EQ)</td>
<td>E1</td>
</tr>
<tr>
<td>Limited quantities (LQ)</td>
<td>5 L</td>
</tr>
<tr>
<td>EmS</td>
<td>F-E, S-D</td>
</tr>
<tr>
<td>Stowage category</td>
<td>A</td>
</tr>
</tbody>
</table>
2-Methyl-1-propanol ≥99 %, for synthesis

article number: CP09

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant provisions of the European Union (EU)

- Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC) Not listed.
- Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS) Not listed.
- Restrictions according to REACH, Annex XVII not listed
- List of substances subject to authorisation (REACH, Annex XIV) not listed
- Seveso Directive

| 2012/18/EU (Seveso III) |

<table>
<thead>
<tr>
<th>No</th>
<th>Dangerous substance/hazard categories</th>
<th>Qualifying quantity (tonnes) for the application of lower and upper-tier requirements</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>P5c</td>
<td>flammable liquids (cat. 2, 3)</td>
<td>5.000 50.000</td>
<td>51)</td>
</tr>
</tbody>
</table>

Notation
51) Flammable liquids, categories 2 or 3 not covered by P5a and P5b

- Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (2004/42/EC, Deco-Paint Directive)
  VOC content 100 %

- Directive on industrial emissions (VOCs, 2010/75/EU)
  VOC content 100 %

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II not listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR) not listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD) not listed

National inventories
Substance is listed in the following national inventories:

- EINECS/ELINCS/NLP (Europe)
- REACH (Europe)
No Chemical Safety Assessment has been carried out for this substance.

### Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>CMR</td>
<td>Carcinogenic, Mutagenic or toxic for Reproduction</td>
</tr>
<tr>
<td>DMEL</td>
<td>Derived Minimal Effect Level</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>EmS</td>
<td>Emergency Schedule</td>
</tr>
<tr>
<td>GHS</td>
<td>&quot;Globally Harmonized System of Classification and Labelling of Chemicals&quot; developed by the United Nations</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>index No</td>
<td>the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
</tr>
<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

### Key literature references and sources for data
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)

### List of relevant phrases (code and full text as stated in chapter 2 and 3)
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

### Code

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H226</td>
<td>flammable liquid and vapour</td>
</tr>
<tr>
<td>H315</td>
<td>causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>causes serious eye damage</td>
</tr>
<tr>
<td>H335</td>
<td>may cause respiratory irritation</td>
</tr>
<tr>
<td>H336</td>
<td>may cause drowsiness or dizziness</td>
</tr>
</tbody>
</table>

**Disclaimer**

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