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

1.1 **Product identifier**

Identification of the substance  
**Isohexane**

Article number  
7576

Registration number (REACH)  
01-2119484651-34-xxxx

Index No  
601-007-00-7

EC number  
295-570-2

CAS number  
92112-69-1

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

Identified uses:  
laboratory chemical  
laboratory and analytical use

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

**e-mail (competent person):** sicherheit@carlroth.de

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 acc. to GHS**

<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. 2)</td>
<td>H225</td>
</tr>
<tr>
<td>3.2</td>
<td>skin corrosion/irritation</td>
<td>(Skin Irrit. 2)</td>
<td>H315</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>
<tr>
<td>3.10</td>
<td>aspiration hazard</td>
<td>(Asp. Tox. 1)</td>
<td>H304</td>
</tr>
</tbody>
</table>
### Classification acc. to GHS

<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>4.1C</td>
<td>hazardous to the aquatic environment - chronic hazard</td>
<td>(Aquatic Chronic 2)</td>
<td>H411</td>
</tr>
</tbody>
</table>

#### The most important adverse physicochemical, human health and environmental effects

**Narcotic effects.**

### 2.2 Label elements

#### Labelling GHS

**Signal word**: Danger

**Pictograms**

- GHS02, GHS07, GHS08, GHS09

**Hazard statements**

- H225: Highly flammable liquid and vapour
- H304: May be fatal if swallowed and enters airways
- H315: Causes skin irritation
- H336: May cause drowsiness or dizziness
- H411: Toxic to aquatic life with long lasting effects

**Precautionary statements**

**Precautionary statements - prevention**

- **P210**: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

**Precautionary statements - response**

- **P301+P310**: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- **P302+P352**: IF ON SKIN: Wash with plenty of soap and water.
- **P331**: Do NOT induce vomiting.
- **P370+P378**: In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.

**Precautionary statements - storage**

- **P403+P233**: Store in a well-ventilated place. Keep container tightly closed.
- **P403+P235**: Store in a well-ventilated place. Keep cool.

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

**Signal word**: Danger

**Symbol(s)**

- H304: May be fatal if swallowed and enters airways.
- P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P331: Do NOT induce vomiting.
2.3 Other hazards
There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Isohexane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index No</td>
<td>601-007-00-7</td>
</tr>
<tr>
<td>Registration number (REACH)</td>
<td>01-2119484651-34-xxxx</td>
</tr>
<tr>
<td>EC number</td>
<td>295-570-2</td>
</tr>
<tr>
<td>CAS number</td>
<td>92112-69-1</td>
</tr>
<tr>
<td>Molecular formula</td>
<td>C₆H₁₄</td>
</tr>
<tr>
<td>Molar mass</td>
<td>86.18 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
Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion
Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed
Aspiration hazard, Cough, Irritation, Dyspnoea, Dizziness, Drowsiness, Narcosis

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
water spray, 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
Do not allow firefighting water to enter drains or water courses. 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
Use personal protective equipment as required. 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. Retain contaminated washing water and dispose of it. 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.

6.4 Reference to other sections
SECTION 7: Handling and storage

7.1 Precautions for safe handling
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. Due to danger of explosion, prevent leakage
of vapours into cellars, flues and ditches.

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.

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)

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Notation</th>
<th>Identifier</th>
<th>TWA [ppm]</th>
<th>TWA [mg/m³]</th>
<th>STEL [ppm]</th>
<th>STEL [mg/m³]</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP</td>
<td>n-hexane</td>
<td>110-54-3</td>
<td>OEL</td>
<td></td>
<td>40</td>
<td>140</td>
<td></td>
<td></td>
<td>JSOH</td>
</tr>
</tbody>
</table>

Notation:

- STEL: Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
- TWA: Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)
8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggles 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
0.4 mm

• 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.
Flame-retardant protective clothing.

Respiratory protection

Respiratory protection necessary at: Aerosol or mist formation. Type: AX (gas filters and combined filters against low-boiling point organic compounds, colour code: Brown).

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>Physical state</th>
<th>liquid (fluid)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
</tbody>
</table>
### Other physical and chemical parameters

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (value)</td>
<td>This information is not available.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>-154 °C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>60 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>-20 °C (closed cup)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>not relevant (fluid)</td>
</tr>
<tr>
<td><strong>Explosive limits</strong></td>
<td></td>
</tr>
<tr>
<td>• lower explosion limit (LEL)</td>
<td>1,2 vol%</td>
</tr>
<tr>
<td>• upper explosion limit (UEL)</td>
<td>7 vol%</td>
</tr>
<tr>
<td><strong>Explosion limits of dust clouds</strong></td>
<td>not relevant</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>227 hPa at 20 °C</td>
</tr>
<tr>
<td>Density</td>
<td>0,65 g/cm³ at 20 °C</td>
</tr>
<tr>
<td>Vapour density</td>
<td>1,44 (air = 1)</td>
</tr>
<tr>
<td>Bulk density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>Information on this property is not available.</td>
</tr>
<tr>
<td><strong>Solubility(ies)</strong></td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>0,01 g/l at 20 °C</td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td></td>
</tr>
<tr>
<td>n-octanol/water (log KOW)</td>
<td>3,21 (TOXNET)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>300 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>not determined</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Shall not be classified as explosive</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>none</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

**10.1 Reactivity**
Risk of ignition. 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**
Danger of explosion: Oxidisers

**10.4 Conditions to avoid**
Keep away from heat.
10.5 Incompatible materials
- different plastic and rubber

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
- Shall not be classified as acutely toxic.

Skin corrosion/irritation
- Causes skin irritation.

Serious eye damage/eye irritation
- Shall not be classified as seriously damaging to the eye or eye irritant.

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 drowsiness or dizziness.

• Specific target organ toxicity - repeated exposure
  - Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard
- May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed
  - Nausea, vomiting, aspiration hazard

• If in eyes
  - Slightly irritating but not relevant for classification

• If inhaled
  - Cough, Dyspnoea, fatigue, narcosis

• If on skin
  - Has degreasing effect on the skin, causes skin irritation

Other information
- None
SECTION 12: Ecological information

12.1 Toxicity
Toxic to aquatic life with long lasting effects.
Aquatic toxicity (chronic)
May cause long-term adverse effects in the aquatic environment.

12.2 Process of degradability
Theoretical Oxygen Demand: 3,527 mg/mg
Theoretical Carbon Dioxide: 3,064 mg/mg

<table>
<thead>
<tr>
<th>Process</th>
<th>Degradation rate</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>biotic/abiotic</td>
<td>6 %</td>
<td>8 d</td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential
Does not significantly accumulate in organisms.
n-octanol/water (log KOW) 3.21

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
Data are not available.

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. Avoid release to the environment. Refer to special instructions/safety data sheets.

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

Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

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.
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 1208
14.2 UN proper shipping name HEXANES
Hazardous ingredients Isohexane
14.3 Transport hazard class(es)

Class 3 (flammable liquids)
14.4 Packing group II (substance presenting medium danger)
14.5 Environmental hazards hazardous to the aquatic environment

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.

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 1208
  Proper shipping name HEXANES
  Particulars in the transport document UN1208, HEXANES, 3, II, (D/E), environmentally hazardous
  Class 3
  Classification code F1
  Packing group II
  Danger label(s) 3 + "fish and tree"

  Environmental hazards yes (hazardous to the aquatic environment)
  Excepted quantities (EQ) E2
  Limited quantities (LQ) 1 L
  Transport category (TC) 2
  Tunnel restriction code (TRC) D/E
  Hazard identification No 33

• International Maritime Dangerous Goods Code (IMDG)
  UN number 1208
Proper shipping name
HEXANES

Particulars in the shipper's declaration
UN1208, HEXANES, 3, II, -20°C c.c., MARINE POLLUTANT

Class
3

Marine pollutant
yes (P) (hazardous to the aquatic environment)

Packing group
II

Danger label(s)
3 + "fish and tree"

Special provisions (SP)
-

Excepted quantities (EQ)
E2

Limited quantities (LQ)
1 L

EmS
F-E, S-D

Stowage category
E

• International Civil Aviation Organization (ICAO-IATA/DGR)

UN number
1208

Proper shipping name
Hexanes

Particulars in the shipper's declaration
UN1208, Hexanes, 3, II

Class
3

Environmental hazards
yes (hazardous to the aquatic environment)

Packing group
II

Danger label(s)
3

Excepted quantities (EQ)
E2

Limited quantities (LQ)
1 L

SECTION 15: Regulatory information

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

National inventories
Substance is listed in the following national inventories:
### Country National inventories Status

<table>
<thead>
<tr>
<th>Country</th>
<th>National inventories</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>AICS</td>
<td>substance is listed</td>
</tr>
<tr>
<td>EU</td>
<td>ECSI</td>
<td>substance is listed</td>
</tr>
<tr>
<td>JP</td>
<td>CSCL-ENCS</td>
<td>substance is listed</td>
</tr>
<tr>
<td>KR</td>
<td>KECI</td>
<td>substance is listed</td>
</tr>
<tr>
<td>NZ</td>
<td>NZIoC</td>
<td>substance is listed</td>
</tr>
<tr>
<td>TR</td>
<td>TCSI</td>
<td>substance is listed</td>
</tr>
</tbody>
</table>

**Legend**

- **AICS**: Australian Inventory of Chemical Substances
- **CICR**: Chemical Inventory and Control Regulation
- **CSCL-ENCS**: List of Existing and New Chemical Substances (CSCL-ENCS)
- **ECSI**: EC Substance Inventory (EINECS, ELINCS, NLP)
- **KECI**: Korea Existing Chemicals Inventory
- **NZIoC**: New Zealand Inventory of Chemicals
- **TCSI**: Taiwan Chemical Substance Inventory

### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

### SECTION 16: Other information

#### 16.1 Indication of changes (revised safety data sheet)

<table>
<thead>
<tr>
<th>Section</th>
<th>Former entry (text/value)</th>
<th>Actual entry (text/value)</th>
<th>Safety-relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Registration number (REACH): This information is not available.</td>
<td>Registration number (REACH): 01-2119484651-34-xxxx</td>
<td>yes</td>
</tr>
<tr>
<td>2.1</td>
<td>Classification acc. to GHS: This substance does not meet the criteria for classification.</td>
<td>Classification acc. to GHS</td>
<td>yes</td>
</tr>
<tr>
<td>2.1</td>
<td>Classification acc. to GHS: change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>2.2</td>
<td>Pictograms: change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>2.2</td>
<td>Hazard statements: change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>2.2</td>
<td>Precautionary statements - prevention: change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>2.2</td>
<td>Precautionary statements - response: change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>2.2</td>
<td>Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.3</td>
<td>Transport hazard class(es)</td>
<td>Transport hazard class(es): class 3 hazard - flammable liquids</td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Particulars in the shipper's declaration: UN1208, HEXANES, 3, II, -21°C c.c., MARINE POL-LUTANT</td>
<td>Particulars in the shipper's declaration: UN1208, HEXANES, 3, II, -20°C c.c., MARINE POL-LUTANT</td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Marine pollutant: yes (hazardous to the aquatic environment)</td>
<td>Marine pollutant: yes (P) (hazardous to the aquatic environment)</td>
<td>yes</td>
</tr>
</tbody>
</table>
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>CMR</td>
<td>Carcinogenic, Mutagenic or toxic for Reproduction</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</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>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</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>JSOH</td>
<td>Japan Society of Occupational Health &quot;Journal of Occupational Health&quot;: Recommendation of Occupational Exposure Limits</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>OEL</td>
<td>workplace exposure limit</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>ppm</td>
<td>parts per million</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>STEL</td>
<td>short-term exposure limit</td>
</tr>
<tr>
<td>TWA</td>
<td>time-weighted average</td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

Key literature references and sources for data
- UN Recommendations on the Transport of Dangerous Good
- Dangerous Goods Regulations (DGR) for the air transport (IATA)
- International Maritime Dangerous Goods Code (IMDG)
List of relevant phrases (code and full text as stated in chapter 2 and 3)

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H225</td>
<td>highly flammable liquid and vapour</td>
</tr>
<tr>
<td>H304</td>
<td>may be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>H315</td>
<td>causes skin irritation</td>
</tr>
<tr>
<td>H336</td>
<td>may cause drowsiness or dizziness</td>
</tr>
<tr>
<td>H411</td>
<td>toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

Disclaimer

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.