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

1.1 Product identifier

Identification of the substance
Calcium carbide

Article number
6667

Registration number (REACH)
01-2119494719-18-xxxx

Index No
006-004-00-9

EC number
200-848-3

CAS number
75-20-7

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

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 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>2.12</td>
<td>substance and mixture which, in contact with water, emits flammable gas</td>
<td>(Water-react. 1)</td>
<td>H260</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>
</tbody>
</table>
2.2 Label elements

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

Signal word: Danger

Pictograms

Hazard statements

H260 In contact with water releases flammable gases which may ignite spontaneously
H315 Causes skin irritation
H318 Causes serious eye damage

Precautionary statements

Precautionary statements - prevention

P231+P232 Handle under inert gas. Protect from moisture.
P280 Wear protective gloves/eye protection.

Precautionary statements - response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish - never use water.

Precautionary statements - storage

P402+P404 Store in a dry place. Store in a closed container.

Hazardous ingredients for labelling: Calcium oxide

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Symbol(s)

H318 Causes serious eye damage.
P280 Wear protective gloves/eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
contains: Calcium oxide

2.3 Other hazards

There is no additional information.
SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description of the mixture
Composition/information on ingredients.

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>wt%</th>
<th>Classification acc. to 1272/2008/EC</th>
<th>Pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>calcium carbide</td>
<td>CAS No 75-20-7</td>
<td>≥ 80</td>
<td>Water-react. 1 / H260</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC No 200-848-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index No 006-004-00-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>REACH Reg. No 01-2119494719-18-XXX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>CAS No 1305-78-8</td>
<td>10 - &lt; 20</td>
<td>Skin Irrit. 2 / H315</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC No 215-138-9</td>
<td></td>
<td>Eye Dam. 1 / H318</td>
<td></td>
</tr>
<tr>
<td></td>
<td>REACH Reg. No 01-2119475325-36-xxxxx</td>
<td></td>
<td>STOT SE 3 / H335</td>
<td></td>
</tr>
</tbody>
</table>

Remarks
For full text of Hazard- and EU Hazard-statements: see SECTION 16.

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. Do not induce vomiting. Call a physician immediately.

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

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
dry extinguishing powder, carbon dioxide (CO2), dry sand

Unsuitable extinguishing media
water, foam

5.2 Special hazards arising from the substance or mixture
Non-combustible.

Hazardous combustion products
In case of fire may be liberated: carbon monoxide (CO), carbon dioxide (CO2), May produce toxic fumes of carbon monoxide if burning. Acetylen

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. Do not breathe dust. Avoid contact with skin, eyes and clothes.

6.2 Environmental precautions
Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up

Advises on how to contain a spill
Covering of drains.

Advises on how to clean up a spill
Take up mechanically. Control of dust. Take up carefully when dry.

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
Provide adequate ventilation.

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
Store in a dry place. Keep only in the original container. Keep under inert gas.

Incompatible substances or mixtures
Observe hints for combined storage. Do not allow contact with water.

Consideration of other advice
• 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 [mg/m³]</th>
<th>STEL [mg/m³]</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>IE</td>
<td>calcium oxide</td>
<td>1305-78-8</td>
<td>OELV</td>
<td>2</td>
<td></td>
<td></td>
<td>S.I. No. 619 of 2001</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

Relevant DNELs/DMELs/PNECs and other threshold levels
• relevant DNELs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<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>Calcium oxide</td>
<td>1305-78-8</td>
<td>DNEL</td>
<td>1 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - local effects</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>1305-78-8</td>
<td>DNEL</td>
<td>4 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>acute - local effects</td>
</tr>
</tbody>
</table>
8.2 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
0,4 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.

Respiratory protection
Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

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**
- Physical state: solid
- Colour: dark grey
- Odour: like: garlic
- Odour threshold: No data available

**Other physical and chemical parameters**
- pH (value): This information is not available.
- Melting point/freezing point: 2.160 °C
- Initial boiling point and boiling range: This information is not available.
- Flash point: not applicable
- Evaporation rate: no data available
- Flammability (solid, gas): Non-flammable

**Explosive limits**
- lower explosion limit (LEL): 1.5 vol%
- upper explosion limit (UEL): 95.4 vol%

**Explosion limits of dust clouds**: these information are not available

**Vapour pressure**: 0 hPa at 20 °C

**Density**: 2.22 g/cm³ at 20 °C

**Vapour density**: This information is not available.

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

**Solubility(ies)**
- Water solubility: 1.600 mg/l at 20 °C, Hydrolysis

**Partition coefficient**
- n-octanol/water (log KOW): 0.37 (ECHA)

**Auto-ignition temperature**: Information on this property is not available.

**Decomposition temperature**: no data available

**Viscosity**: not relevant (solid matter)

**Explosive properties**: Shall not be classified as explosive

**Oxidising properties**: none
SECTION 10: Stability and reactivity

10.1 Reactivity
Risk of ignition.

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
Material reacts vigorously with water emitting flammable gases. Violent reaction with: Bases, Methanol, Oxidisers, Acids

10.4 Conditions to avoid
Keep away from heat. Protect from moisture.

10.5 Incompatible materials
Copper, silver

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.

<table>
<thead>
<tr>
<th>Exposure route</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50</td>
<td>&gt;2.000 mg/kg</td>
<td>Rat</td>
<td>ECHA</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50</td>
<td>&gt;2.500 mg/kg</td>
<td>Rabbit</td>
<td>ECHA</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
Shall not be classified as a specific target organ toxicant (single exposure).
• **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

**Other information**
None

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)**

**Aquatic toxicity (acute) of components of the mixture**

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium oxide</td>
<td>1305-78-8</td>
<td>LC50</td>
<td>158 mg/l</td>
<td>aquatic invertebrates</td>
<td>96 h</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>1305-78-8</td>
<td>ErC50</td>
<td>184.6 mg/l</td>
<td>algae</td>
<td>72 h</td>
</tr>
</tbody>
</table>

**Aquatic toxicity (chronic)**

**Aquatic toxicity (chronic) of components of the mixture**

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium oxide</td>
<td>1305-78-8</td>
<td>LC50</td>
<td>53.1 mg/l</td>
<td>aquatic invertebrates</td>
<td>14 d</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>1305-78-8</td>
<td>EC50</td>
<td>300.4 mg/l</td>
<td>microorganisms</td>
<td>3 h</td>
</tr>
</tbody>
</table>

12.2 **Process of degradability**
The methods for determining the biological degradability are not applicable to inorganic substances.
Calcium carbide  techn., 7-20 mm

article number: 6667

12.3 Bioaccumulative potential
Does not significantly accumulate in organisms.

n-octanol/water (log KOW) 0,37

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.

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 1402

14.2 UN proper shipping name CALCIUM CARBIDE

Hazardous ingredients Calcium carbide

14.3 Transport hazard class(es)

Class 4.3 (substances which, in contact with water, emit flammable gases)

14.4 Packing group I (substance presenting high 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.

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: 1402
- Proper shipping name: CALCIUM CARBIDE
- Particulars in the transport document: UN1402, CALCIUM CARBIDE, 4.3, I, (B/E)
- Class: 4.3
- Classification code: W2
- Packing group: I
- Danger label(s): 4.3

- Excepted quantities (EQ): E0
- Limited quantities (LQ): 0
- Transport category (TC): 1
- Tunnel restriction code (TRC): B/E
- Hazard identification No: X423

• International Maritime Dangerous Goods Code (IMDG)

- UN number: 1402
- Proper shipping name: CALCIUM CARBIDE
- Particulars in the shipper's declaration: UN1402, CALCIUM CARBIDE, 4.3, I
- Class: 4.3
- Packing group: I
- Danger label(s): 4.3
- Special provisions (SP): 951
- Excepted quantities (EQ): E0
- Limited quantities (LQ): 0
- EmS: F-G, S-N
- Stowage category: B
Safety data sheet  
according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Calcium carbide  techn., 7-20 mm

article number: 6667

• International Civil Aviation Organization (ICAO-IATA/DGR)
  UN number 1402
  Proper shipping name Calcium carbide
  Particulars in the shipper's declaration UN1402, Calcium carbide, 4.3, I
  Class 4.3
  Packing group I
  Danger label(s) 4.3

  Excepted quantities (EQ) E0

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)
  None of the ingredients are listed.

• Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)
  None of the ingredients are listed.

• Regulation 850/2004/EC on persistent organic pollutants (POP)
  None of the ingredients are listed.

• Restrictions according to REACH, Annex XVII
  None of the ingredients are listed.

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Wt%</th>
<th>Type of registration</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbide</td>
<td></td>
<td>100</td>
<td>1907/2006/EC annex XVII</td>
<td>40</td>
</tr>
</tbody>
</table>

• List of substances subject to authorisation (REACH, Annex XIV)
  None of the ingredients are 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>O2</td>
<td>other hazards (Water-react., cat. 1)</td>
<td>100 500</td>
<td>59)</td>
</tr>
</tbody>
</table>

Notation 59) Substances and mixtures which in contact with water emit flammable gases, category 1
Safety data sheet
according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Calcium carbide  techn., 7-20 mm

article number: 6667

- 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 0 %

- Directive on industrial emissions (VOCs, 2010/75/EU)
  VOC content 0 %

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II
None of the ingredients are listed.

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)
None of the ingredients are listed.

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)
None of the ingredients are listed.

National inventories
- EINECS/ELINCS/NLP (Europe)
- DSL/NDSL (Canada)
- Toxic Substance Control Act (TSCA)

15.2 Chemical Safety Assessment
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

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>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</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>EC No</td>
<td>The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)</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>Eye Dam.</td>
<td>seriously damaging to the eye</td>
</tr>
<tr>
<td>Eye Irrit.</td>
<td>irritant to the eye</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>IATA</td>
<td>International Air Transport Association</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Description of used abbreviations</th>
</tr>
</thead>
<tbody>
<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>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>Skin Corr.</td>
<td>corrosive to skin</td>
</tr>
<tr>
<td>Skin Irrit.</td>
<td>irritant to skin</td>
</tr>
<tr>
<td>STEL</td>
<td>short-term exposure limit</td>
</tr>
<tr>
<td>STOT SE</td>
<td>specific target organ toxicity - single exposure</td>
</tr>
<tr>
<td>TWA</td>
<td>time-weighted average</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>Water-react.</td>
<td>material which, in contact with water, emits flammable gases</td>
</tr>
</tbody>
</table>

**Key literature references and sources for data**
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)
- 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>H260</td>
<td>in contact with water releases flammable gases which may ignite spontaneously</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>
</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.