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

1.1 Product identifier

Identification of the substance: Acetonitrile

- Article number: T907
- Registration number (REACH): 01-2119471307-38-xxxx
- Index No: 608-001-00-3
- EC number: 200-835-2
- CAS number: 75-05-8

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

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. 2)</td>
<td>H225</td>
</tr>
<tr>
<td>3.1O</td>
<td>acute toxicity (oral)</td>
<td>(Acute Tox. 4)</td>
<td>H302</td>
</tr>
<tr>
<td>3.1D</td>
<td>acute toxicity (dermal)</td>
<td>(Acute Tox. 4)</td>
<td>H312</td>
</tr>
<tr>
<td>3.1I</td>
<td>acute toxicity (inhal.)</td>
<td>(Acute Tox. 4)</td>
<td>H332</td>
</tr>
<tr>
<td>3.3</td>
<td>serious eye damage/eye irritation</td>
<td>(Eye Irrit. 2)</td>
<td>H319</td>
</tr>
</tbody>
</table>
2.2 Label elements

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

Signal word | Danger
---|---
Pictograms | ![Flammable Symbol] ![Danger Symbol]

Hazard statements

- H225: Highly flammable liquid and vapour
- H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled
- H319: Causes serious eye irritation

Precautionary statements

Precautionary statements - prevention

- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- 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.

Precautionary statements - storage

- 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) | ![Flammable Symbol] ![Danger Symbol]

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>Acetonitrile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index No</td>
<td>608-001-00-3</td>
</tr>
<tr>
<td>Registration number (REACH)</td>
<td>01-2119471307-38-xxxx</td>
</tr>
<tr>
<td>EC number</td>
<td>200-835-2</td>
</tr>
<tr>
<td>CAS number</td>
<td>75-05-8</td>
</tr>
<tr>
<td>Molecular formula</td>
<td>C2H3N</td>
</tr>
<tr>
<td>Molar mass</td>
<td>41,05 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 all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact
Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion
Rinse mouth with water (only if the person is conscious). Call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

After eye contact: Irritant effects, Conjunctival redness of the eyes,
Following skin contact: Localised redness, oedema, pruritis and/or pain,
After ingestion: Vomiting, Irritation, Headaches and dizziness may occur,
Following inhalation: Cough, pain, choking, and breathing difficulties

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: nitrogen oxides (NOx), 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.

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

<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>EU</td>
<td>acetonitrile</td>
<td>75-05-8</td>
<td>IOELV</td>
<td></td>
<td>40</td>
<td>70</td>
<td></td>
<td></td>
<td>2017/2398/EU</td>
</tr>
<tr>
<td>MT</td>
<td>acetonitrile</td>
<td>75-05-8</td>
<td>OELV</td>
<td></td>
<td>40</td>
<td>70</td>
<td></td>
<td></td>
<td>CAP. 424</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)

### 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>68 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>68 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>acute - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>68 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - local effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>68 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>acute - local effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>32.2 mg/kg bw/day</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic 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>10 mg/l</td>
<td>water</td>
<td>intermittent release</td>
</tr>
<tr>
<td>PNEC</td>
<td>10 mg/l</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>PNEC</td>
<td>1 mg/l</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>PNEC</td>
<td>32 mg/l</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>PNEC</td>
<td>7.53 mg/kg</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>
### Acetonitrile ROTISOLV® ≥99.9 %, UV/IR-Grade

**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>2.41 mg/kg</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>

**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**
    Butyl caoutchouc (butyl rubber)

  - **material thickness**
    0.5 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: A (against organic gases and vapours with a boiling point of > 65 °C, 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**
- **Physical state**: liquid (fluid)
- **Colour**: colourless
- **Odour**: characteristic mild sweet

**Other physical and chemical parameters**
- **pH (value)**: This information is not available.
- **Melting point/freezing point**: -45.7 °C
- **Initial boiling point and boiling range**: 81.6 °C at 1.013 hPa
- **Flash point**: 12.8 °C
- **Evaporation rate**: no data available
- **Flammability (solid, gas)**: not relevant (fluid)

**Explosive limits**
- **lower explosion limit (LEL)**: 4.4 vol% (50 g/m³)
- **upper explosion limit (UEL)**: 16 vol% (274 g/m³)

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

**Vapour pressure**: 94.51 hPa at 20 °C

**Density**: 0.782 g/cm³ at 20 °C

**Vapour density**: 1.42 (air = 1)

**Bulk density**: Not applicable

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

**Solubility(ies)**
- **Water solubility**: 1.000 g/l at 25 °C

**Partition coefficient**
- **n-octanol/water (log KOW)**: -0.34
- **Soil organic carbon/water (log KOC)**: 0.654 (ECHA)

**Auto-ignition temperature**
- ECHA: 524 °C

**Decomposition temperature**: no data available

**Viscosity**
- **Dynamic viscosity**: 0.39 mPa s at 20 °C

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

**Oxidising properties**: none
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
Violent reaction with: Peroxides, Strong oxidiser, Strong acid

10.4 Conditions to avoid
There are no specific conditions known which have to be avoided.

10.5 Incompatible materials
Rubber articles

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

<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>469 mg/kg</td>
<td>mouse</td>
<td>ECHA</td>
</tr>
<tr>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2,000 mg/kg</td>
<td>rabbit</td>
<td>ECHA</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Causes serious eye irritation.

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
  nausea, vomiting, dizziness
• If in eyes
  slightly irritant but not relevant for classification
• If inhaled
  cough, pain, choking, and breathing difficulties
• If on skin
  Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc

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)

<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>1.640 mg/l</td>
<td>fish</td>
<td>ECHA</td>
<td>96 h</td>
</tr>
<tr>
<td>EC50</td>
<td>3.560 mg/l</td>
<td>algae</td>
<td>ECHA</td>
<td>72 h</td>
</tr>
<tr>
<td>ErC50</td>
<td>9.696 mg/l</td>
<td>algae</td>
<td>ECHA</td>
<td>72 h</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>LC50</td>
<td>&gt;102 mg/l</td>
<td>fish</td>
<td>ECHA</td>
<td>7 d</td>
</tr>
<tr>
<td>LOEC</td>
<td>&gt;102 mg/l</td>
<td>fish</td>
<td>ECHA</td>
<td>21 d</td>
</tr>
<tr>
<td>NOEC</td>
<td>102 mg/l</td>
<td>fish</td>
<td>ECHA</td>
<td>21 d</td>
</tr>
</tbody>
</table>

12.2 Process of degradability
The substance is readily biodegradable.
Theoretical Oxygen Demand with nitrification: 3,118 mg/mg
Theoretical Oxygen Demand: 1,559 mg/mg
Theoretical Carbon Dioxide: 2,144 mg/mg

<table>
<thead>
<tr>
<th>Process</th>
<th>Degradation rate</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>biotic/abiotic</td>
<td>98 %</td>
<td>28 d</td>
</tr>
<tr>
<td>carbon dioxide generation</td>
<td>70 %</td>
<td>21 d</td>
</tr>
</tbody>
</table>
Safety data sheet
according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Acetonitrile ROTISOLV® ≥99,9 %, UV/IR-Grade

article number: T907

n-octanol/water (log KOW) -0,34

12.4 Mobility in soil
Henry's law constant 3,5 \( \text{Pa m}^3/\text{mol} \) at 20 °C
The Organic Carbon normalised adsorption coefficient 0,654

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.

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
14.2 UN proper shipping name
ACETONITRILE
Hazardous ingredients
Acetonitrile
14.3 Transport hazard class(es)
Class 3 (flammable liquids)
14.4 Packing group
II (substance presenting medium 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)

<table>
<thead>
<tr>
<th>Class</th>
<th>Classification code</th>
<th>Packing group</th>
<th>Danger label(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>F1</td>
<td>II</td>
<td>3</td>
</tr>
</tbody>
</table>

- Exempted 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)

<table>
<thead>
<tr>
<th>Class</th>
<th>Marine pollutant</th>
<th>Packing group</th>
<th>Danger label(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>-</td>
<td>II</td>
<td>3</td>
</tr>
</tbody>
</table>

- Special provisions (SP): -
- Exempted quantities (EQ): E2
- Limited quantities (LQ): 1 L
- EmS: F-E, S-D

---

Safety data sheet
according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Acetonitrile ROTISOLV® ≥99.9 %, UV/IR-Grade
article number: T907
Safety data sheet
going back to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Acetonitrile ROTISOLV® ≥99.9 %, UV/IR-Grade

article number: T907

Stowage category B
• International Civil Aviation Organization (ICAO-IATA/DGR)
  UN number 1648
  Proper shipping name Acetonitrile
  Particulars in the shipper's declaration UN1648, Acetonitrile, 3, II
  Class 3
  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
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.
• Regulation 850/2004/EC on persistent organic pollutants (POP)
  Not listed.
• Restrictions according to REACH, Annex XVII

<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>Acetonitrile</td>
<td></td>
<td>100</td>
<td>1907/2006/EC annex XVII</td>
<td>3</td>
</tr>
<tr>
<td>Acetonitrile</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)
  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</td>
<td>51)</td>
</tr>
</tbody>
</table>

Notation
51) Flammable liquids, categories 2 or 3 not covered by P5a and P5b
Acetonitrile ROTISOLV® ≥99.9 %, UV/IR-Grade

article number: T907

- 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:

<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>CA</td>
<td>DSL</td>
<td>substance is listed</td>
</tr>
<tr>
<td>CN</td>
<td>IECSC</td>
<td>substance is listed</td>
</tr>
<tr>
<td>EU</td>
<td>ECSI</td>
<td>substance is listed</td>
</tr>
<tr>
<td>EU</td>
<td>REACH Reg.</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>MX</td>
<td>INSQ</td>
<td>substance is listed</td>
</tr>
<tr>
<td>NZ</td>
<td>NZIoC</td>
<td>substance is listed</td>
</tr>
<tr>
<td>PH</td>
<td>PICCS</td>
<td>substance is listed</td>
</tr>
<tr>
<td>TR</td>
<td>CICR</td>
<td>substance is listed</td>
</tr>
<tr>
<td>TW</td>
<td>TCSI</td>
<td>substance is listed</td>
</tr>
<tr>
<td>US</td>
<td>TSCA</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)
DSL   Domestic Substances List (DSL)
ECSI  EC Substance Inventory (EINECS, ELINCS, NLP)
IECS  Inventory of Existing Chemical Substances Produced or Imported in China
INSQ  National Inventory of Chemical Substances
KECI  Korea Existing Chemicals Inventory
NZIoC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances
REACH Reg. REACH registered substances
TCSI  Taiwan Chemical Substance Inventory
TSCA  Toxic Substance Control Act

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>2.1</td>
<td>Remarks: For full text of Hazard- and EU Hazard-state- ments: see SECTION 16.</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>8.1</td>
<td>Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>8.1</td>
<td>* human health values: change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>8.1</td>
<td>* environmental values: 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: UN1648, ACETONITRILE, 3, II, 6°C c.c.</td>
<td>Particulars in the shipper’s declaration: UN1648, ACETONITRILE, 3, II, 12,8°C c.c.</td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Marine pollutant:</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>* International Civil Aviation Organization (ICAO-IATA/DGR)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>UN number: 1648</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Proper shipping name: Acetonitrile</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Particulars in the shipper’s declaration: UN1648, Acetonitrile, 3, II</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Class: 3</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Packing group: II</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Danger label(s): 3</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Danger label(s): change in the listing (table)</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Excepted quantities (EQ): E2</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>14.8</td>
<td>Limited quantities (LQ): 1 L</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<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>
<td></td>
<td></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>
<td></td>
<td></td>
</tr>
<tr>
<td>CAP. 424</td>
<td>Occupational Health and Safety Authority Act (CAP. 424)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMR</td>
<td>Carcinogenic, Mutagenic or toxic for Reproduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMEL</td>
<td>Derived Minimal Effect Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EmS</td>
<td>Emergency Schedule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHS</td>
<td>&quot;Globally Harmonized System of Classification and Labelling of Chemicals&quot; developed by the United Nations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
<td></td>
<td></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>
<td></td>
<td></td>
</tr>
<tr>
<td>IOELV</td>
<td>indicative occupational exposure limit value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ppm</td>
<td>parts per million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
<td></td>
<td></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>
<td></td>
<td></td>
</tr>
<tr>
<td>STEL</td>
<td>short-term exposure limit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA</td>
<td>time-weighted average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
<td></td>
<td></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>H225</td>
<td>highly flammable liquid and vapour</td>
</tr>
<tr>
<td>H302</td>
<td>harmful if swallowed</td>
</tr>
<tr>
<td>H312</td>
<td>harmful in contact with skin</td>
</tr>
<tr>
<td>H319</td>
<td>causes serious eye irritation</td>
</tr>
<tr>
<td>H332</td>
<td>harmful if inhaled</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.