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

1.1 Product identifier

Identification of the substance

Biomethanol

Registration number (REACH)

01-2119433307-44-xxxx

EC number

200-659-6

CAS number

67-56-1

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

Relevant identified uses

Professional use

Industrial use

See attached exposure scenarios

1.3 Details of the supplier of the safety data sheet

BioMethanol Chemie Nederland B.V. (BioMCN)

Oosterhorn 10

9936 HD Farmsum

251

Netherlands

Telephone: +31 (0) 88 664 7700

e-mail: info@biomcn.eu

Website: http://www.biomcn.eu/

1.4 Emergency telephone number

Emergency information service

+31 (0) 88 664 7700

This number is only available during the following office hours: Mon-Fri 09:00 - 17:00

Poison centre

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (NPIS)</td>
<td>0344-8920111</td>
</tr>
<tr>
<td></td>
<td>(medical professionals only)</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>NHS</td>
<td>non-emergency: 111 or a doctor; emergency: 999</td>
</tr>
<tr>
<td></td>
<td>(general public)</td>
<td></td>
</tr>
</tbody>
</table>

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>Category</th>
<th>Hazard class and category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6</td>
<td>flammable liquid</td>
<td>2</td>
<td>Flam. Liq. 2</td>
<td>H225</td>
</tr>
<tr>
<td>3.1O</td>
<td>acute toxicity (oral)</td>
<td>3</td>
<td>Acute Tox. 3</td>
<td>H301</td>
</tr>
<tr>
<td>3.1D</td>
<td>acute toxicity (dermal)</td>
<td>3</td>
<td>Acute Tox. 3</td>
<td>H311</td>
</tr>
<tr>
<td>3.1I</td>
<td>acute toxicity (inhal.)</td>
<td>3</td>
<td>Acute Tox. 3</td>
<td>H331</td>
</tr>
<tr>
<td>3.8</td>
<td>specific target organ toxicity - single exposure</td>
<td>1</td>
<td>STOT SE 1</td>
<td>H370</td>
</tr>
</tbody>
</table>
For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects
Immediate effects can be expected after short-term exposure. The product is combustible and can be ignited by potential ignition sources.

Additional information
According to the results of its assessment, this substance is not a PBT or a vPvB.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008 (CLP) Labelling:
- signal word danger
- pictograms GHS02, GHS06, GHS08
- hazard statements
  H225 Highly flammable liquid and vapour.
  H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
  H370 Causes damage to organs (eye, heart, brain, liver, central nervous system).
- precautionary statements
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P241 Use explosion-proof electrical/ventilating/lighting/tooling/equipment.
  P260 Do not breathe mist/vapours/spray.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/….
  P303+P353 IF ON SKIN (or hair): take off immediately all contaminated clothing. Rinse skin with water/shower.
  P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  P403+P235 Store in a well-ventilated place. Keep cool.
  P501 Dispose of contents/container to ...

2.3 Other hazards
Results of PBT and vPvB assessment
According to the results of its assessment, this substance is not a PBT or a vPvB. According to the results of its assessment, this substance is not a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances
Name of substance Biomethanol
Identifiers
REACH Reg. No 01-2119433307-44-xxxx
CAS No 67-56-1
EC No 200-659-6
Index No 603-001-00-X
Purity 100 %
Molecular formula CH4O
Molar mass 32.04 g/mol
Structural formula

United Kingdom: en Page: 2 / 15
Remarks
All the percentages given are percentages by weight unless stated otherwise.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes
Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation
Mouth to mouth resuscitation should be avoided. Use alternative methods, preferably with oxygen or compressed air driven apparatus. Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

Following skin contact
Take off immediately all contaminated clothing. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.

Following eye contact
Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart.

Following ingestion
Rinse mouth with water (only if the person is conscious). Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed
For specialist advice physicians should contact the anti poison control centre. Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Alcohol resistant foam. Dry extinguishing powder. Carbon dioxide (CO2). Foam.

Unsuitable extinguishing media
Water jet.

5.2 Special hazards arising from the substance or mixture
In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products
During fire hazardous fumes/smoke could be produced, Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters
Self-contained breathing apparatus (SCBA), Standard protective clothing for firefighters
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Follow emergency procedures such as the need to evacuate the danger area or to consult an expert. Remove persons to safety. Warning and evacuating people in the neighbourhood. Ventilate affected area. Control of dust. Keep away from sources of ignition - No smoking.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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

Wipe up with absorbent material (e.g. cloth, fleece).

Appropriate containment techniques

Use of adsorbent materials.

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

Recommendations

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

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools.

- specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.
- flammability hazards
  Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- incompatible substances or mixtures
  Observe hints for combined storage. Incompatible materials: see section 10.

Control of effects

Protect against external exposure, such as
High temperatures, UV-radiation/sunlight, Static discharges

Consideration of other advice
Store in a well-ventilated place. Keep container tightly closed.

- ventilation requirements
  Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation. Ground/bond container and receiving equipment.

- packaging compatibilities
  Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)
There is no additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>National limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupational exposure limit values (Workplace Exposure Limits)</strong></td>
</tr>
<tr>
<td><strong>Country</strong></td>
</tr>
<tr>
<td>EU</td>
</tr>
<tr>
<td>GB</td>
</tr>
</tbody>
</table>

Notation
STELE - 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

<table>
<thead>
<tr>
<th>Relevant DNELs and other threshold levels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Endpoint</strong></td>
</tr>
<tr>
<td>DNEL</td>
</tr>
<tr>
<td>DNEL</td>
</tr>
<tr>
<td>DNEL</td>
</tr>
<tr>
<td>DNEL</td>
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<td>DNEL</td>
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<tr>
<td>DNEL</td>
</tr>
<tr>
<td>DNEL</td>
</tr>
<tr>
<td>DNEL</td>
</tr>
</tbody>
</table>
8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection. (EN 166).

Skin protection

Protective clothing (EN 340).

- hand protection

Wear suitable gloves. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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. Chemical protection gloves are suitable, which are tested according to EN 374. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Butyl rubber

- material thickness
  \( \geq 0.7 \text{ mm} \)
- breakthrough times of the glove material
  \( >480 \text{ minutes (permeation: level 6)} \)

- other protection measures
  Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.
  Respiratory protection
  In case of inadequate ventilation wear respiratory protection. Self-contained breathing apparatus (EN 133).
  Environmental exposure controls
  Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>pungent</td>
</tr>
</tbody>
</table>

Other safety parameters

| pH (value) | not determined |
| Melting point/freezing point | -97.8 °C |
| Initial boiling point and boiling range | 64.7 °C at 1,013 hPa |
| Flash point | 9.7 °C at 1,013 hPa |
| Evaporation rate | not determined |
| Flammability (solid, gas) | not relevant (fluid) |

Explosive limits

| - lower explosion limit (LEL) | 4.4 vol% |
| - upper explosion limit (UEL) | 38.5 vol% |
| Vapour pressure | 169.3 hPa at 25 °C |
| Density | 795 kg/m³ at 15 °C |
| Vapour density | this information is not available |
Of no significance.

It's a reactive substance. The mixture contains reactive substance(s). Risk of ignition.

Risk of ignition
See below “Conditions to avoid”.

No known hazardous reactions.

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

Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

9.2 Other information
Of no significance.

SECTION 10: Stability and reactivity

10.1 Reactivity
It's a reactive substance. The mixture contains reactive substance(s). Risk of ignition.

If heated:
Risk of ignition

10.2 Chemical stability
See below “Conditions to avoid”.

10.3 Possibility of hazardous reactions
No known hazardous reactions.

10.4 Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from heat.

Hints to prevent fire or explosion
Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials
Oxidisers, Sodium, Magnesium

10.6 Hazardous decomposition products
Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.

<table>
<thead>
<tr>
<th>Exposure route</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>inhalation: vapour</td>
<td>LC50</td>
<td>128,200 mg/m³/4h</td>
<td>rat</td>
</tr>
<tr>
<td>inhalation: vapour</td>
<td>LC50</td>
<td>85,400 mg/m³/4h</td>
<td>cat</td>
</tr>
<tr>
<td>dermal</td>
<td>LD50</td>
<td>17,100 mg/kg</td>
<td>rabbit</td>
</tr>
<tr>
<td>oral</td>
<td>LD50</td>
<td>&gt;7 mg/kg</td>
<td>monkey</td>
</tr>
<tr>
<td>oral</td>
<td>LD50</td>
<td>&gt;1,187 mg/kg</td>
<td>rat</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

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.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Fertility:

NOAEC (Rat) = 1.3 mg/L
NOAEC (Monkey) = 2.39 mg/L
NOAEL(Oral) Sperm = 1000 mg/kg bw/day

Developmental Toxicity:

NOAEC (Rat) = 1.33 mg/L
LOAEL (Mouse) = 1700 mg/kg

Developmental Toxicity:

NOAEC (Rat, Mouse) = 1.33 mg/L
LOAEL(Mouse) = 5000 mg/kg.

Specific target organ toxicity - single exposure

Causes damage to organs (eye, heart, brain, liver, central nervous system). Exposure route: Oral. Inhalation.

<table>
<thead>
<tr>
<th>Hazard category</th>
<th>Target organ</th>
<th>Exposure route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>eye</td>
<td>if swallowed</td>
</tr>
<tr>
<td>1</td>
<td>heart</td>
<td>if inhaled</td>
</tr>
<tr>
<td>1</td>
<td>brain</td>
<td>if inhaled</td>
</tr>
<tr>
<td>1</td>
<td>liver</td>
<td>if inhaled</td>
</tr>
<tr>
<td>1</td>
<td>central nervous system</td>
<td>if swallowed</td>
</tr>
</tbody>
</table>
Specific target organ toxicity - repeated exposure
Shall not be classified as a specific target organ toxicant (repeated exposure).

<table>
<thead>
<tr>
<th>Exposure route</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>oral</td>
<td>LOAEL</td>
<td>2,340 mg/kg</td>
<td>not specified</td>
<td>3d</td>
</tr>
<tr>
<td>inhalation: vapour</td>
<td>NOAEL</td>
<td>13 mg/m²</td>
<td>not specified</td>
<td>7mth</td>
</tr>
</tbody>
</table>

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

Absorption, metabolism, distribution and excretion studies
Rapidly metabolised.
Metabolised to the following: Formaldehyde. Metabolised to the following: water, Carbon dioxide (CO).
Metabolised before excretion. Excreted to the air during respiration.

SECTION 12: Ecological information

12.1 Toxicity
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>IC50</td>
<td>&gt;880 mg/l</td>
<td>microorganisms</td>
<td></td>
<td>24 h</td>
</tr>
</tbody>
</table>

Biodegradation
The substance is readily biodegradable. The relevant substances of the mixture are readily biodegradable.

12.2 Persistence and degradability

<table>
<thead>
<tr>
<th>Process of degradability</th>
<th>Degradation rate</th>
<th>Time</th>
<th>Source</th>
</tr>
</thead>
</table>
12.3 Bioaccumulative potential
n-octanol/water (log KOW) | -0.77 (ECHA)
BCF | <10 (<10)

12.4 Mobility in soil
Data are not available.

Henry's law constant | 0.461 Pa m³/mol at 25 °C
The Organic Carbon normalised adsorption coefficient | 0.13 - 1

12.5 Results of PBT and vPvB assessment
According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Other adverse effects
Data are not available.
Endocrine disrupting potential
Not listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Waste treatment-relevant information
Solvent reclamation/regeneration.

Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings
It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks
Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
SECTION 14: Transport information

14.1 UN number 1230
14.2 UN proper shipping name METHANOL
14.3 Transport hazard class(es)
   Class 3 (flammable liquids)
   Subsidiary risk(s) 6.1 (acute toxicity)
14.4 Packing group II (substance presenting medium danger)
14.5 Environmental hazards 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
No data available.

Information for each of the UN Model Regulations
Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
UN number 1230
Proper shipping name METHANOL
Class 3
Classification code FT1
Packing group II
Danger label(s) 3+6.1

Special provisions (SP) 279, 802(ADN)
Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L
Transport category (TC) 2
Tunnel restriction code (TRC) D/E
Hazard identification No 336
Emergency Action Code 2WE

International Maritime Dangerous Goods Code (IMDG)
UN number 1230
Proper shipping name METHANOL
Class 3
Subsidiary risk(s) 6.1
Packing group II
Danger label(s) 3+6.1
**Special provisions (SP)**
- 279

**Excepted quantities (EQ)**
- E2

**Limited quantities (LQ)**
- 1 L

**EmS**
- F-E, S-D

**Stowage category**
- B

**International Civil Aviation Organization (ICAO-IATA/DGR)**
- UN number: 1230
- Proper shipping name: Methanol
- Class: 3
- Subsidiary risk(s): 6.1
- Packing group: II
- Danger label(s): 3

**Special provisions (SP)**
- A104, A113

**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)**

- Restrictions according to REACH, Annex XVII
  - not listed

- List of substances subject to authorisation (REACH, Annex XIV)
  - not listed none of the ingredients are listed

**Seveso Directive**

<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>22</td>
<td>methanol</td>
<td>500</td>
<td>5,000</td>
</tr>
</tbody>
</table>

**Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

- not listed
For this substance a chemical safety assessment has been carried out.

15.2 Chemical Safety Assessment
For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Indication of changes (revised safety data sheet)
Complete revision of the safety data sheet.

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>BCF</td>
<td>BioConcentration Factor</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>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>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>
<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>IOELV</td>
<td>indicative occupational exposure limit value</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>ppm</td>
<td>parts per million</td>
</tr>
</tbody>
</table>


This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<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>
<tr>
<td>WEL</td>
<td>workplace exposure limit</td>
</tr>
</tbody>
</table>

Key literature references and sources for data

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>H301</td>
<td>toxic if swallowed</td>
</tr>
<tr>
<td>H311</td>
<td>toxic in contact with skin</td>
</tr>
<tr>
<td>H331</td>
<td>toxic if inhaled</td>
</tr>
<tr>
<td>H370</td>
<td>causes damage to organs (eye, heart, brain, liver, central nervous system)</td>
</tr>
</tbody>
</table>

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