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

1.1 Product identifier

<table>
<thead>
<tr>
<th>Trade name</th>
<th>Methanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration number (REACH)</td>
<td>01-211943307-44-0169</td>
</tr>
<tr>
<td>EC number</td>
<td>200-659-6</td>
</tr>
<tr>
<td>Index number in CLP Annex VI</td>
<td>603-001-00-X</td>
</tr>
<tr>
<td>CAS number</td>
<td>67-56-1</td>
</tr>
</tbody>
</table>

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

Relevant identified uses: General use

1.3 Details of the supplier of the safety data sheet

Atlantic Methanol Services B.V.
Zuidplein 126, WTC Tower H, 15th Floor
1077XV Amsterdam
Netherlands

Telephone: +31 20 240 3080
Website: www.atlanticmethanol.com

1.4 Emergency telephone number

Emergency information service: 1.713.305.5698 or 1. 832.506.4801 (Emergency Contact Numbers for AMPCO Marketing, L.L.C.)

Poison centre

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Telephone</th>
<th>Telefax</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CHEMTREC International (outside USA)</td>
<td>1-703-527-3887</td>
<td></td>
</tr>
</tbody>
</table>

As above or next toxicological information centre.

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>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>2.6</td>
</tr>
</tbody>
</table>
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.

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

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

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, central nervous system).

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.
P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

2.3 Other hazards

There is no additional information.

Results of PBT and vPvB assessment
Methanol

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

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>methanol</th>
</tr>
</thead>
</table>

**Identifiers**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>67-56-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC No</td>
<td>200-659-6</td>
</tr>
<tr>
<td>Index No</td>
<td>603-001-00-X</td>
</tr>
</tbody>
</table>

**Molecular formula**

CH₄O

**Molar mass**

32.04 g/mol

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

**General notes**

Take off immediately all contaminated clothing. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

**Following inhalation**

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

**Following skin contact**

Wash with plenty of soap and water.

**Following eye contact**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.

**Following ingestion**

Induce vomiting when the affected person is not unconscious. Call a physician immediately.

**Notes for the doctor**

none

#### 4.2 Most important symptoms and effects, both acute and delayed

Narcotic effects.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Alcoholic beverage let be drunken in little sips
SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
water spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO2)

Unsuitable extinguishing media
water jet

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.
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
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
use suitable breathing apparatus

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Remove persons to safety.
Ventilate affected area.
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.

For emergency responders
Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water.
Retain contaminated washing water and dispose of it.
If substance has entered a water course or sewer, inform the responsible authority.
6.3 Methods and material for containment and cleaning up

Advises on how to clean up a spill

Collect spillage.
Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

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

Hazardous combustion products: see section 5.
Personal protective equipment: see section 8.
Incompatible materials: see section 10.
Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.
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.
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.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.
Wash hands after use.
Preventive skin protection (barrier creams/ointments) is recommended.
Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities
**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 heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Take precautionary measures against static discharge.
Ground/bond container and receiving equipment.
Protect from sunlight.

**Incompatible substances or mixtures**
Incompatible materials: see section 10.

**Protect against external exposure, such as**
heat

**Consideration of other advice**
Keep away from food, drink and animal feedingstuffs.

**Ventilation requirements**
Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted.
Provision of sufficient ventilation.

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

### 7.3 Specific end use(s)
No information available.

---

**SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

<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>methanol</td>
<td>67-56-1</td>
<td>IOELV</td>
<td></td>
<td>200</td>
<td>260</td>
<td></td>
<td></td>
<td>2017/2398/EU</td>
</tr>
<tr>
<td>GB</td>
<td>methanol</td>
<td>67-56-1</td>
<td>WEL</td>
<td></td>
<td>200</td>
<td>266</td>
<td>250</td>
<td>333</td>
<td>EH40/2005</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)
Human health values

Relevant DNELs and other threshold levels

<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>260 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>40 mg/kg bw/day</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>50 mg/m³</td>
<td>human, inhalatory</td>
<td>consumer (private households)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>8 mg/kg bw/day</td>
<td>human, dermal</td>
<td>consumer (private households)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>8 mg/kg bw/day</td>
<td>human, oral</td>
<td>consumer (private households)</td>
<td>chronic - systemic effects</td>
</tr>
</tbody>
</table>

Environmental values

Relevant PNECs and other threshold levels

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Environmental compartment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEC</td>
<td>20.8 mg/l</td>
<td>freshwater</td>
</tr>
<tr>
<td>PNEC</td>
<td>2.08 mg/l</td>
<td>marine water</td>
</tr>
<tr>
<td>PNEC</td>
<td>1,540 mg/l</td>
<td>water</td>
</tr>
<tr>
<td>PNEC</td>
<td>100 mg/l</td>
<td>sewage treatment plant (STP)</td>
</tr>
<tr>
<td>PNEC</td>
<td>77 mg/kg</td>
<td>freshwater sediment</td>
</tr>
<tr>
<td>PNEC</td>
<td>7.7 mg/kg</td>
<td>marine sediment</td>
</tr>
<tr>
<td>PNEC</td>
<td>100 mg/kg</td>
<td>soil</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Appropriate engineering controls
General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection
Wear eye/face protection.

Hand protection

<table>
<thead>
<tr>
<th>Material</th>
<th>Material thickness</th>
<th>Breakthrough times of the glove material</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIR: isobutene-isoprene (butyl) rubber</td>
<td>≥ 0.7 mm</td>
<td>&gt;480 minutes (permeation: level 6)</td>
</tr>
<tr>
<td>FKM: fluoro-elastomer</td>
<td>≥ 0.4 mm</td>
<td>&gt;240 minutes (permeation: level 5)</td>
</tr>
</tbody>
</table>
Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. 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.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Type: AX (gas filters and combined filters against low-boiling point organic compounds, colour code: Brown).

**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

**Appearance**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Form</td>
<td>fluid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>pungent</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>these information are not available</td>
</tr>
</tbody>
</table>

**Other safety parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (value)</td>
<td>these information are not available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>-97.8 °C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>64.7 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>9.7 °C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>these information are not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>not relevant (fluid)</td>
</tr>
</tbody>
</table>

**Explosive limits**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower explosion limit (LEL)</td>
<td>6 vol%</td>
</tr>
<tr>
<td>Upper explosion limit (UEL)</td>
<td>36 vol%</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>169.3 hPa at 25 °C</td>
</tr>
<tr>
<td>Density</td>
<td>0.79 – 0.8 ( g/cm^3 ) at 20 °C</td>
</tr>
<tr>
<td>Vapour density</td>
<td>these information are not available</td>
</tr>
</tbody>
</table>
Methanol

Relative density: these information are not available

**Solubility**
Water solubility: miscible in any proportion

**Partition coefficient**
n-octanol/water (log KOW): -0.77
Auto-ignition temperature: 455 °C
Relative self-ignition temperature for solids: not relevant (Fluid)
Decomposition temperature: these information are not available

**Viscosity**
Kinematic viscosity: these information are not available
Dynamic viscosity: 0.544 – 0.59 mPa s at 25 °C

**Explosive properties**
not explosive

**Oxidising properties**
shall not be classified as oxidising

### 9.2 Other information
Temperature class (EU, acc. to ATEX): T1

#### SECTION 10: Stability and reactivity

**10.1 Reactivity**
This material is not reactive under normal ambient conditions.
If heated:
risk of ignition

**10.2 Chemical stability**
See below "Conditions to avoid".

**10.3 Possibility of hazardous reactions**
In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture.

**10.4 Conditions to avoid**
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Take precautionary measures against static discharge.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.

**10.5 Incompatible materials**
oxidisers
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
If not otherwise specified the classification is based on:
Animal studies; Evidence from any other toxicity tests; Expert judgement (weight of evidence determination).

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>128.2 mg/l/4h</td>
<td>rat</td>
</tr>
<tr>
<td>oral</td>
<td>LD50</td>
<td>&gt;1,187 – 2,769 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
Skin sensitisation
Shall not be classified as a skin sensitiser.
Respiratory sensitisation
Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Germ cell mutagenicity
Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Carcinogenicity
Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Reproductive toxicity
Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.
Specific target organ toxicity - single exposure

<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 exposed</td>
</tr>
<tr>
<td>1</td>
<td>central nervous system</td>
<td>if exposed</td>
</tr>
</tbody>
</table>

Specific target organ toxicity - repeated exposure

Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

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

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)
Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>15,400 mg/l</td>
<td>bluegill (Lepomis macrochirus)</td>
<td>96 h</td>
</tr>
<tr>
<td>EC50</td>
<td>12,700 mg/l</td>
<td>bluegill (Lepomis macrochirus)</td>
<td>96 h</td>
</tr>
<tr>
<td>EC50</td>
<td>18,260 mg/l</td>
<td>daphnia magna</td>
<td>96 h</td>
</tr>
<tr>
<td>ErC50</td>
<td>~22,000 mg/l</td>
<td>algae (pseudokirchneriella subcapitata)</td>
<td>96 h</td>
</tr>
</tbody>
</table>

Aquatic toxicity (chronic)
No data available.

12.2 Persistence and degradability

Biodegradation
The substance is readily biodegradable.

Persistence
Data are not available.

12.3 Bioaccumulative potential
Data are not available.

n-octanol/water (log KOW) -0.77

12.4 Mobility in soil
Data are not available.

Henry's law constant 0.461 Pa m³/mol at 25 °C
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.

Remarks
Wassergefährdungsklasse, WGK (water hazard class): 2

SECTION 13: Disposal considerations

13.1 Waste treatment methods
This material and its container must be disposed of as hazardous waste.

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. Handle contaminated packages in the same way as the substance itself.

Remarks
Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number
1230

14.2 UN proper shipping name
METHANOL

14.3 Transport hazard class(es)
Class
3
Subsidiary risk(s)
6.1
(acute toxicity)

14.4 Packing group
II

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
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>Information</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>1230</td>
</tr>
<tr>
<td>Proper shipping name</td>
<td>UN1230, METHANOL, 3 (6.1), II, (D/E)</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Classification code</td>
<td>FT1</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Danger label(s)</td>
<td>3+6.1</td>
</tr>
<tr>
<td>Special provisions (SP)</td>
<td>279, 802(ADN)</td>
</tr>
<tr>
<td>Excepted quantities (EQ)</td>
<td>E2</td>
</tr>
<tr>
<td>Limited quantities (LQ)</td>
<td>1 L</td>
</tr>
<tr>
<td>Transport category (TC)</td>
<td>2</td>
</tr>
<tr>
<td>Tunnel restriction code (TRC)</td>
<td>D/E</td>
</tr>
<tr>
<td>Hazard identification No</td>
<td>336</td>
</tr>
<tr>
<td>Emergency Action Code</td>
<td>2WE</td>
</tr>
</tbody>
</table>

International Maritime Dangerous Goods Code (IMDG)

<table>
<thead>
<tr>
<th>Information</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>1230</td>
</tr>
<tr>
<td>Proper shipping name</td>
<td>UN1230, METHANOL, 3 (6.1), II, 9.7°C c.c.</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Subsidiary risk(s)</td>
<td>6.1</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Danger label(s)</td>
<td>3+6.1</td>
</tr>
<tr>
<td>Special provisions (SP)</td>
<td>279</td>
</tr>
<tr>
<td>Excepted quantities (EQ)</td>
<td>E2</td>
</tr>
<tr>
<td>Limited quantities (LQ)</td>
<td>1 L</td>
</tr>
<tr>
<td>EmS</td>
<td>F-E, S-D</td>
</tr>
<tr>
<td>Stowage category</td>
<td>B</td>
</tr>
</tbody>
</table>
Methanol

International Civil Aviation Organization (ICAO-IATA/DGR)

UN number 1230

Proper shipping name UN1230, Methanol, 3 (6.1), II

Class 3

Subsidiary risk(s) 6.1

Packing group II

Danger label(s) 3+6.1

Special provisions (SP) 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

<table>
<thead>
<tr>
<th>Dangerous substances with restrictions (REACH, Annex XVII)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of substance</td>
</tr>
<tr>
<td>methanol</td>
</tr>
<tr>
<td>methanol</td>
</tr>
</tbody>
</table>

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

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

Regulation 98/2013/EU on the marketing and use of explosives precursors
not listed

15.2 Chemical Safety Assessment

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

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>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</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>
</tbody>
</table>
Methanol

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<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>IDELV</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>
<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>SVHC</td>
<td>Substance of Very High Concern</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

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).
International Maritime Dangerous Goods Code (IMDG).
Dangerous Goods Regulations (DGR) for the air transport (IATA).

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, central nervous system).</td>
</tr>
</tbody>
</table>
Methanol

Responsible for the safety data sheet
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47809 Krefeld
Telephone: +49 (0) 2151 - 652086 - 0
Telefax: +49 (0) 2151 - 652086 - 9
e-Mail: info@csb-online.de
Website: www.csb-online.de

Disclaimer
This information is based upon the present state of our knowledge.
This SDS has been compiled and is solely intended for this product.
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.03.2018
Trade name: Methanol

Annex: Exposure scenario 1

- **Short title of the exposure scenario** ES 1: Use in detergents, de-icers (liquid products) - consumers
- **Sector of Use** SU21 Consumer uses: Private households / general public / consumers
- **Product category**
  - PC4 Anti-Freeze and de-icing products
  - PC35 Washing and cleaning products (including solvent based products)
- **Environmental release category**
  - ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
  - ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
  - **Duration and frequency**
    - Inhalation: duration of exposition 240 min duration of use 20 min
  - **Physical parameters**
    - **Physical state** liquid
  - **Concentration of the substance in the mixture** ≤ 2.5 %
  - **Used amount per time or activity**
    - Inhalation: 100 g
    - Dermal: 5 g
  - **Other operational conditions**
    - **Other operational conditions affecting environmental exposure** No special measures required.
    - **Other operational conditions affecting consumer exposure** Oral absorption is not expected.
    - **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
  - **Worker protection**
    - **Personal protective measures**
      Do not inhale gases / fumes / aerosols.
      Avoid contact with the skin.
    - **Measures for consumer protection**
      Ensure adequate labelling.
  - **Environmental protection measures**
    - **Water**
      Do not allow to reach ground water, water bodies or sewage system.
    - **Disposal measures**
      Ensure that waste is collected and contained.
  - **Disposal procedures**
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Waste type** Partially emptied and uncleaned packaging

(Contd. on page 19)
Trade name: Methanol

- **Exposure estimation**
  - **Workers** Not relevant for this Exposure Scenario.
  - **Environment** No further relevant information available.
  - **Consumer** No further relevant information available.
  - **Guidance for downstream users** No further relevant information available.
Annex: Exposure scenario 2

- **Short title of the exposure scenario** ES 2: Use in detergents, de-icers (aerosols) - consumers
- **Sector of Use** SU21  Consumer uses: Private households / general public / consumers
- **Product category**
  - PC4  Anti-Freeze and de-icing products
  - PC35  Washing and cleaning products (including solvent based products)
- **Environmental release category**
  - ERC8a  Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
  - ERC8d  Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
- **Description of the activities/processes covered in the Exposure Scenario**
  - See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
  - **Duration and frequency**
    - **Cleaning:**
      - Inhalation: duration of exposition 60 min duration of use 10 min
      - Spraying:
        - Inhalation: duration of exposition 24.6 s duration of use 24.6 s
  - **Physical parameters**
    - **Physical state** liquid
    - **Concentration of the substance in the mixture** ≤ 5 %
    - **Used amount per time or activity**
      - Cleaning:
        - Dermal: 0.160 g
        - Inhalation: 16.2 g
    - **Other operational conditions**
    - **Other operational conditions affecting environmental exposure** No special measures required.
    - **Other operational conditions affecting consumer exposure**
      - Oral absorption is not expected.
      - **Inhalation:**
        - Room volume 15 m³
        - 2.5 air changes per hour
        - T: 20 °C
      - **Dermal:**
        - Absorption: 100 %
      - **Cleaning:**
        - Skin surface potentially exposed: 215 cm²
      - **Spraying:**
        - Skin surface potentially exposed: 960 cm²
    - **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
  - **Worker protection**
  - **Personal protective measures**
    - Do not inhale gases / fumes / aerosols.
    - Avoid contact with the skin.
  - **Measures for consumer protection** Ensure adequate labelling.
Environmental protection measures
- Water Do not allow to reach ground water, water bodies or sewage system.
- Disposal measures Ensure that waste is collected and contained.
- Disposal procedures
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Waste type Partially emptied and uncleaned packaging
- Exposure estimation
- Workers Not relevant for this Exposure Scenario.
- Environment No further relevant information available.
- Consumer No further relevant information available.
- Guidance for downstream users No further relevant information available.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Methanol

Annex: Exposure scenario 3

- Short title of the exposure scenario
  ES 3: Use in fuel, household / hobby, e.g. model engines, fuel tanks, fondue set (indoor use) - consumers
- Sector of Use SU21 Consumer uses: Private households / general public / consumers
- Product category PC13 Fuels
- Environmental release category
  ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
- Description of the activities / processes covered in the Exposure Scenario
  See section 1 of the annex to the Safety Data Sheet.
- Conditions of use
  - Duration and frequency
    2 days per week
  - Physical parameters
    - Physical state liquid
  - Concentration of the substance in the mixture ≤ 80 %
  - Used amount per time or activity Inhalation: 800 g
  - Other operational conditions
  - Other operational conditions affecting environmental exposure No special measures required.
  - Other operational conditions affecting consumer exposure
    Oral absorption is not expected.
    Inhalation:
    Room volume 20 m³
    0.5 air changes per hour
    Release area: 2 cm²
    T: 20 °C
  - Dermal:
    Absorption: 100 %
    Skin surface potentially exposed: 430 cm²
  - Other operational conditions affecting consumer exposure during the use of the product
    Not applicable.
- Risk management measures
- Worker protection
- Personal protective measures
  - Do not inhale gases / fumes / aerosols.
  - Avoid contact with the skin.
- Measures for consumer protection
  - Ensure adequate labelling.
  - Concentrations ≥ 9 - ≤ 80 weight-%
  - Efficiency of protective gloves: ≥ 90 %
- Environmental protection measures
  - Water Do not allow to reach ground water, water bodies or sewage system.
  - Disposal measures
    - Ensure that waste is collected and contained.
  - Disposal procedures
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  - Waste type Partially emptied and uncleaned packaging
Exposure estimation
- Workers Not relevant for this Exposure Scenario.
- Environment No further relevant information available.
- Consumer No further relevant information available.
- Guidance for downstream users No further relevant information available.
### Annex: Exposure scenario 4

- **Short title of the exposure scenario** ES 4: Use in fuel, fuel additive (outdoor use) - consumers
- **Sector of Use** SU21 Consumer uses: Private households / general public / consumers
- **Product category** PC13 Fuels
- **Environmental release category** ERC8e Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)

**Description of the activities/processes covered in the Exposure Scenario**

See section 1 of the annex to the Safety Data Sheet.

- **Conditions of use**
- **Duration and frequency**
  - 2 days per week
  - Inhalation: duration of exposition 10 min duration of use 10 min
- **Physical parameters**
- **Physical state** liquid
- **Concentration of the substance in the mixture** 3%
- **Used amount per time or activity**
  - Inhalation: 5.00E+4 g
  - Dermal: 10 g
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting consumer exposure** Oral absorption is not expected.

**Inhalation:**
- Room volume 20 m³
- 0.5 air changes per hour
- Release area: 2 cm²
- T: 20 °C

**Dermal:**
- Absorption: 100%
- Skin surface potentially exposed: 430 cm²

**Other operational conditions affecting consumer exposure during the use of the product** Not applicable.

**Risk management measures**
- **Worker protection**
- **Personal protective measures**
  - Do not inhale gases / fumes / aerosols.
  - Avoid contact with the skin.

**Measures for consumer protection** Ensure adequate labelling.

- **Environmental protection measures**
- **Water** Do not allow to reach ground water, water bodies or sewage system.
- **Disposal measures** Ensure that waste is collected and contained.
- **Disposal procedures** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Waste type** Partially emptied and uncleaned packaging
- **Exposure estimation**
- **Workers** Not relevant for this Exposure Scenario.
- **Environment** No further relevant information available.
Trade name: Methanol

- **Consumer** No further relevant information available.
- **Guidance for downstream users** No further relevant information available.
Annex: Exposure scenario 5

- **Short title of the exposure scenario**: ES 5: Distribution
- **Sector of Use**: SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category**
  - PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
  - PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions.
  - PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition.
  - PROC4 Chemical production where opportunity for exposure arises.
  - PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
  - PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities.
  - PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing).

- **Environmental release category**
  - ERC1 Manufacture of the substance.
  - ERC2 Formulation into mixture.

- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.

- **Conditions of use**
  - **Duration and frequency**: 8hrs (full working shift).

- **Physical parameters**
  - **Physical state**: liquid.

- **Concentration of the substance in the mixture**: ≤ 100 %.

- **Other operational conditions**

- **Other operational conditions affecting environmental exposure**: No special measures required.

- **Other operational conditions affecting worker exposure**
  - Avoid contact with the skin.
  - Do not breathe gas/vapour/aerosol.
  - Take precautionary measures against static discharge.
  - Keep away from sources of ignition - No smoking.
  - Covers use at ambient temperatures + max. 20 °C.

- **Other operational conditions affecting consumer exposure**: Oral absorption is not expected.

- **Other operational conditions affecting consumer exposure during the use of the product**: Not applicable.

- **Risk management measures**
  - **Worker protection**
    - **Organisational protective measures**: No special measures required.
    - **Technical protective measures**
      - Provide explosion-proof electrical equipment.
      - Ensure that suitable extractors are available on processing machines.
      - Clean transport lines before decoupling.
      - Use enclosed means of conveyance.
      - Empty and flush systems before commissioning or servicing equipment.
  - **Personal protective measures**
    - Do not inhale gases / fumes / aerosols.
    - Avoid contact with the skin.
Trade name: Methanol

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

Solvent resistant gloves.

- **Measures for consumer protection** Ensure adequate labelling.
- **Environmental protection measures**
  - **Water** Do not allow to reach ground water, water bodies or sewage system.
  - **Disposal measures** Ensure that waste is collected and contained.

**Disposal procedures**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Waste type** Partially emptied and uncleaned packaging

**Exposure estimation** The exposure estimation was carried out in accordance with ECETOC TRA.

- **Worker (oral)** No significant oral exposure
- **Worker (dermal)** The calculated value is smaller than the DNEL.
- **Worker (inhalation)** The calculated value is smaller than the DNEL.
- **Environment** No further relevant information available.
- **Consumer** Not relevant for this Exposure Scenario.

**Guidance for downstream users**
Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.

For the risk assessment, the tools recommended by ECHA can be used.
Annex: Exposure scenario 6

- **Short title of the exposure scenario** ES 6: Formulation and repackaging of substances and mixtures
- **Sector of Use** SU3  Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category**
  - PROC 1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
  - PROC 2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions.
  - PROC 3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition.
  - PROC 4 Chemical production where opportunity for exposure arises.
  - PROC 8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
  - PROC 8b Transfer of substance or mixture (charging and discharging) at dedicated facilities.
  - PROC 9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing).
  - PROC 15 Use as laboratory reagent.
- **Environmental release category** ERC 2  Formulation into mixture.
- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
- **Duration and frequency** 8hrs (full working shift).
- **Physical parameters**
  - **Physical state** liquid
  - **Concentration of the substance in the mixture** ≤ 100%
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
  - Avoid contact with the skin.
  - Do not breathe gas/vapour/aerosol.
  - Take precautionary measures against static discharge.
  - Keep away from sources of ignition - No smoking.
  - Covers use at ambient temperatures + max. 20 °C.
- **Other operational conditions affecting consumer exposure** Oral absorption is not expected.
- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
  - **Worker protection**
  - **Organisational protective measures** No special measures required.
  - **Technical protective measures**
    - Provide explosion-proof electrical equipment.
    - Ensure that suitable extractors are available on processing machines.
    - Clean transport lines before decoupling.
    - Use enclosed means of conveyance.
    - Empty and flush systems before commissioning or servicing equipment.
  - **Personal protective measures**
    - Do not inhale gases / fumes / aerosols.
    - Avoid contact with the skin.
    - If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Methanol

Solvent resistant gloves.

Measures for consumer protection  Ensure adequate labelling.

Environmental protection measures

Water  Do not allow to reach ground water, water bodies or sewage system.

Disposal measures  Ensure that waste is collected and contained.

Disposal procedures
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Waste type  Partially emptied and uncleaned packaging

Exposure estimation The exposure estimation was carried out in accordance with ECETOC TRA.

Worker (oral)  No significant oral exposure

Worker (dermal)  The calculated value is smaller than the DNEL.

Worker (inhalation)  The calculated value is smaller than the DNEL.

Environment  No further relevant information available.

Consumer  No further relevant information available.

Guidance for downstream users
Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.

For the risk assessment, the tools recommended by ECHA can be used.
### Annex: Exposure scenario 7

- **Short title of the exposure scenario** ES 7: Manufacture
- **Sector of Use**
  - SU8  Manufacture of bulk, large scale chemicals (including petroleum products)
  - SU9  Manufacture of fine chemicals
- **Process category**
  - PROC1  Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
  - PROC2  Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
  - PROC3  Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
  - PROC4  Chemical production where opportunity for exposure arises
  - PROC8a  Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
  - PROC8b  Transfer of substance or mixture (charging and discharging) at dedicated facilities
  - PROC15  Use as laboratory reagent
- **Environmental release category**
  - ERC1  Manufacture of the substance
  - ERC4  Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
  - ERC6a  Use of intermediate
  - ERC6b  Use of reactive processing aid at industrial site (no inclusion into or onto article)
- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
  - **Duration and frequency**
    - 8hrs (full working shift).
    - 5 workdays/week.
  - **Physical parameters**
    - **Physical state** liquid
  - **Other operational conditions**
  - **Other operational conditions affecting environmental exposure** No special measures required.
  - **Other operational conditions affecting worker exposure**
    - Indoor application.
    - Avoid contact with the skin.
    - Do not breathe gas/vapour/aerosol.
    - Take precautionary measures against static discharge.
    - Keep away from sources of ignition - No smoking.
    - Covers use at ambient temperatures + max. 20 °C.
  - **Other operational conditions affecting consumer exposure** Oral absorption is not expected.
  - **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
  - **Worker protection**
  - **Organisational protective measures** Deploy only trained chemical workers.
  - **Technical protective measures**
    - Provide explosion-proof electrical equipment.
Ensure that suitable extractors are available on processing machines.
(not less than 3 - 5 air changes per hour)
Clean transport lines before decoupling.
Use enclosed means of conveyance.

**Personal protective measures**
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
Solvent resistant gloves.

**Measures for consumer protection**
Ensure adequate labelling.

**Environmental protection measures**

**Water**
Do not allow to reach ground water, water bodies or sewage system.

**Disposal measures**
Ensure that waste is collected and contained.

**Disposal procedures**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Waste type**
Partially emptied and uncleaned packaging

**Exposure estimation**
The exposure estimation was carried out in accordance with ECETOC TRA.

**Worker (oral)**
No significant oral exposure

**Worker (dermal)**
The calculated value is smaller than the DNEL.

**Worker (inhalation)**
The calculated value is smaller than the DNEL.

**Environment**
No further relevant information available.

**Consumer**
No further relevant information available.

**Guidance for downstream users**
Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.
For the risk assessment, the tools recommended by ECHA can be used.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Methanol

Annex: Exposure scenario 8

- **Short title of the exposure scenario** ES 8: Use in fuel - industrial
- **Sector of Use** SU3  Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category**
  - PROC1  Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
  - PROC2  Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
  - PROC3  Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
  - PROC8a  Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
  - PROC8b  Transfer of substance or mixture (charging and discharging) at dedicated facilities
  - PROC16  Use of fuels
  - PROC19  Manual activities involving hand contact
- **Environmental release category** ERC7  Use of functional fluid at industrial site
- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
- **Duration and frequency** 8hrs (full working shift).
- **Physical parameters**
  - **Physical state** liquid
  - **Concentration of the substance in the mixture** ≤ 100 %
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
  - Avoid contact with the skin.
  - Do not inhale gases / fumes / aerosols.
  - Avoid contact with the skin.
  - Take precautionary measures against static discharge.
  - Keep away from sources of ignition - No smoking.
  - Covers use at ambient temperatures + max. 20 °C.
- **Other operational conditions affecting consumer exposure** Oral absorption is not expected.
- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
- **Worker protection**
  - **Organisational protective measures** Deploy only trained chemical workers.
  - **Technical protective measures**
    - Provide explosion-proof electrical equipment.
    - Ensure that suitable extractors are available on processing machines.
    - Clean transport lines before decoupling.
    - Use enclosed means of conveyance.
    - Empty and flush systems before commissioning or servicing equipment.
- **Personal protective measures**
  - Do not inhale gases / fumes / aerosols.
  - Avoid contact with the skin.
  - If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
  - Solvent resistant gloves.
Measures for consumer protection
Ensure adequate labelling.

Environmental protection measures
- Water: Do not allow to reach ground water, water bodies or sewage system.
- Disposal measures: Ensure that waste is collected and contained.

Disposal procedures
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Waste type: Partially emptied and uncleaned packaging
- Exposure estimation: The exposure estimation was carried out in accordance with ECETOC TRA.
- Worker (oral): No significant oral exposure
- Worker (dermal): The calculated value is smaller than the DNEL
- Worker (inhalation): The calculated value is smaller than the DNEL
- Environment: No further relevant information available.
- Consumer: No further relevant information available.

Guidance for downstream users
Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.
For the risk assessment, the tools recommended by ECHA can be used.
Annex: Exposure scenario 9

- **Short title of the exposure scenario** ES 9: Use in fuel - professional
- **Sector of Use**
  - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Process category**
  - PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
  - PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
  - PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
  - PROC5a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
  - PROC5b Transfer of substance or mixture (charging and discharging) at dedicated facilities
  - PROC8a Use of fuels
  - PROC8b Use of fuels
  - PROC16 Use of fuels
  - PROC19 Manual activities involving hand contact
- **Environmental release category**
  - ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
  - ERC8e Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)
- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
  - **Duration and frequency** 8hrs (full working shift).
  - **Worker** Avoid activities involving exposure for more than 1 h.
- **Physical parameters**
  - **Physical state** liquid
  - **Concentration of the substance in the mixture** ≤ 100 %
- **Other operational conditions**
  - **Other operational conditions affecting environmental exposure** No special measures required.
  - **Other operational conditions affecting worker exposure**
    - Avoid contact with the skin.
    - Do not breathe gas/vapour/aerosol.
    - Take precautionary measures against static discharge.
    - Keep away from sources of ignition - No smoking.
    - Covers use at ambient temperatures + max. 20 °C.
  - **Other operational conditions affecting consumer exposure** Oral absorption is not expected.
  - **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
  - **Worker protection**
  - **Technical protective measures**
    - Provide explosion-proof electrical equipment.
    - Ensure that suitable extractors are available on processing machines.
    - Clean transport lines before decoupling.
    - Use enclosed means of conveyance.
    - Empty and flush systems before commissioning or servicing equipment.
  - **Personal protective measures**
    - Do not inhale gases / fumes / aerosols.
Avoid contact with the skin. If all workplace limits are observed and good ventilation is ensured, no special precautions necessary. Solvent resistant gloves. **Measures for consumer protection** Ensure adequate labelling. **Environmental protection measures**  - **Water** Do not allow to reach ground water, water bodies or sewage system.  - **Disposal measures** Ensure that waste is collected and contained. **Disposal procedures** Must not be disposed of together with household garbage. Do not allow product to reach sewage system. **Waste type** Partially emptied and uncleaned packaging  - **Exposure estimation** The exposure estimation was carried out in accordance with ECETOC TRA.  - **Worker (oral)** No significant oral exposure  - **Worker (dermal)** The calculated value is smaller than the DNEL.  - **Worker (inhalation)** The calculated value is smaller than the DNEL.  - **Environment** No further relevant information available.  - **Consumer** No further relevant information available. **Guidance for downstream users** Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment. For the risk assessment, the tools recommended by ECHA can be used.
Annex: Exposure scenario 10

- **Short title of the exposure scenario** ES 10: Use in detergents - industrial
- **Sector of Use** SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category**
  - PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
  - PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions.
  - PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition.
  - PROC4 Chemical production where opportunity for exposure arises.
  - PROC7 Industrial spraying.
  - PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
  - PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities.
  - PROC10 Roller application or brushing.
  - PROC13 Treatment of articles by dipping and pouring.
- **Environmental release category**
  - ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article).
- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
  - **Duration and frequency** 8hrs (full working shift).
- **Physical parameters**
  - **Physical state** liquid.
  - **Concentration of the substance in the mixture** \( \leq 100\% \).
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
  - Avoid contact with the skin.
  - Do not inhale gas/vapour/aerosol.
  - Take precautionary measures against static discharge.
  - Keep away from sources of ignition - No smoking.
  - Covers use at ambient temperatures + max. 20 °C.
- **Other operational conditions affecting consumer exposure** Oral absorption is not expected.
- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
- **Worker protection**
  - **Technical protective measures**
    - Provide explosion-proof electrical equipment.
    - Ensure that suitable extractors are available on processing machines.
    - Clean transport lines before decoupling.
    - Use enclosed means of conveyance.
    - Empty and flush systems before commissioning or servicing equipment.
- **Personal protective measures**
  - Do not inhale gases / fumes / aerosols.
  - Avoid contact with the skin.
If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

- **Measures for consumer protection** Ensure adequate labelling.

- **Environmental protection measures**
  - **Water** Do not allow to reach ground water, water bodies or sewage system.
  - **Disposal measures** Ensure that waste is collected and contained.

- **Disposal procedures**
  - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  - **Waste type** Partially emptied and uncleaned packaging

- **Exposure estimation** The exposure estimation was carried out in accordance with ECETOC TRA.
  - **Worker (oral)** No significant oral exposure
  - **Worker (dermal)** The calculated value is smaller than the DNEL.
  - **Worker (inhalation)** The calculated value is smaller than the DNEL.
  - **Environment** No further relevant information available.
  - **Consumer** No further relevant information available.

- **Guidance for downstream users**
  - Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.
  - For the risk assessment, the tools recommended by ECHA can be used.
Annex: Exposure scenario 11

- **Short title of the exposure scenario** ES 11: Laboratory reagent - industrial
- **Sector of Use** SU3  Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category**
  - PROC10  Roller application or brushing
  - PROC15  Use as laboratory reagent
- **Environmental release category**
  - ERC4  Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
- **Duration and frequency** 8hrs (full working shift).
- **Physical parameters**
  - **Physical state** liquid
  - **Concentration of the substance in the mixture** ≤ 100 %
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
  - Avoid contact with the skin.
  - Do not inhale gases / fumes / aerosol.
  - Take precautionary measures against static discharge.
  - Keep away from sources of ignition - No smoking.
  - Covers use at ambient temperatures + max. 20 °C.
- **Other operational conditions affecting consumer exposure** Oral absorption is not expected.
- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
- **Worker protection**
  - **Technical protective measures**
    - Provide explosion-proof electrical equipment.
    - Ensure that suitable extractors are available on processing machines.
  - **Personal protective measures**
    - Do not inhale gases / fumes / aerosols.
    - Avoid contact with the skin.
    - If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
    - Solvent resistant gloves.
- **Measures for consumer protection** Ensure adequate labelling.
- **Environmental protection measures**
- **Disposal procedures**
  - **Waste type** Partially emptied and uncleaned packaging
- **Exposure estimation** The exposure estimation was carried out in accordance with ECETOC TRA.
- **Worker (oral)** No significant oral exposure
- **Worker (dermal)** The calculated value is smaller than the DNEL.
- **Worker (inhalation)** The calculated value is smaller than the DNEL.
Trade name: Methanol

· **Environment** No further relevant information available.
· **Consumer** No further relevant information available.
· **Guidance for downstream users**
  Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.
  For the risk assessment, the tools recommended by ECHA can be used.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Methanol

Annex: Exposure scenario 12

- Short title of the exposure scenario ES 12: Laboratory reagent - professional
- Sector of Use
  SU22  Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- Process category
  PROC10  Roller application or brushing
  PROC15  Use as laboratory reagent
- Environmental release category
  ERC8a  Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
- Description of the activities / processes covered in the Exposure Scenario
  See section 1 of the annex to the Safety Data Sheet.
- Conditions of use
- Duration and frequency 8hrs (full working shift).
- Physical parameters
  Physical state liquid
  Concentration of the substance in the mixture \( \leq 100\% \)
- Other operational conditions
- Other operational conditions affecting environmental exposure No special measures required.
- Other operational conditions affecting worker exposure
  Avoid contact with the skin.
  Do not inhale gases / fumes / aerosols.
  Take precautionary measures against static discharge.
  Keep away from sources of ignition - No smoking.
  Covers use at ambient temperatures + max. 20 °C.
- Other operational conditions affecting consumer exposure Oral absorption is not expected.
- Other operational conditions affecting consumer exposure during the use of the product Not applicable.
- Risk management measures
- Worker protection
- Technical protective measures
  Provide explosion-proof electrical equipment.
  Ensure that suitable extractors are available on processing machines.
- Personal protective measures
  Do not inhale gases / fumes / aerosols.
  Avoid contact with the skin.
  If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
  Solvent resistant gloves.
- Measures for consumer protection Ensure adequate labelling.
- Environmental protection measures
- Water Do not allow to reach ground water, water bodies or sewage system.
- Disposal measures Ensure that waste is collected and contained.
- Disposal procedures
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Waste type Partially emptied and uncleaned packaging
- Exposure estimation The exposure estimation was carried out in accordance with ECETOC TRA.
- Worker (oral) No significant oral exposure
- Worker (dermal) The calculated value is smaller than the DNEL.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Methanol

- **Worker (inhalation)** The calculated value is smaller than the DNEL.
- **Environment** No further relevant information available.
- **Consumer** No further relevant information available.
- **Guidance for downstream users**
  Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.
  For the risk assessment, the tools recommended by ECHA can be used.
Annex: Exposure scenario 13

- **Short title of the exposure scenario** ES 13: Use in oil and gas field drilling and production plants - industrial
- **Sector of Use** SU3  Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category**
  - PROC4  Chemical production where opportunity for exposure arises
  - PROC5  Mixing or blending in batch processes
  - PROC8a  Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
  - PROC8b  Transfer of substance or mixture (charging and discharging) at dedicated facilities
- **Environmental release category** ERC7  Use of functional fluid at industrial site
- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
- **Duration and frequency** 8hrs (full working shift).
- **Worker** Avoid activities involving exposure for more than 4 h.
- **Physical parameters**
  - **Physical state** liquid
  - **Concentration of the substance in the mixture** ≤ 100 %
  - PROC 8a, 8b: ≤ 5 %
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
  - Avoid contact with the skin.
  - Do not breathe gas/vapour/aerosol.
  - Take precautionary measures against static discharge.
  - Keep away from sources of ignition - No smoking.
  - Covers use at ambient temperatures + max. 20 °C.
- **Other operational conditions affecting consumer exposure** Oral absorption is not expected.
- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
  - **Worker protection**
  - **Organisational protective measures**
    - Ensure that activities are executed by specialists or authorised personnel only.
  - **Technical protective measures**
    - Provide explosion-proof electrical equipment.
    - Ensure that suitable extractors are available on processing machines.
    - Empty and flush systems before commissioning or servicing equipment.
  - **Personal protective measures**
    - Do not inhale gases / fumes / aerosols.
    - Avoid contact with the skin.
    - If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
    - Solvent resistant gloves.
  - **Measures for consumer protection** Ensure adequate labelling.
  - **Environmental protection measures**
    - **Water** Do not allow to reach ground water, water bodies or sewage system.
  - **Disposal measures** Ensure that waste is collected and contained.
Disposal procedures
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Waste type
Partially emptied and uncleaned packaging

Exposure estimation
The exposure estimation was carried out in accordance with ECETOC TRA.

Worker (oral)
No significant oral exposure

Worker (dermal)
The calculated value is smaller than the DNEL.

Worker (inhalation)
The calculated value is smaller than the DNEL.

Environment
No further relevant information available.

Consumer
No further relevant information available.

Guidance for downstream users
Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.
For the risk assessment, the tools recommended by ECHA can be used.
**Annex: Exposure scenario 14**

- **Short title of the exposure scenario** ES 14: Use as wastewater treatment chemical - industrial
- **Sector of Use** SU3  Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category** PROC2   Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
- **Environmental release category** ERC7   Use of functional fluid at industrial site
- **Description of the activities / processes covered in the Exposure Scenario** See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
  - **Duration and frequency** 8hrs (full working shift).
  - **Worker** Avoid activities involving exposure for more than 4 h.
- **Physical parameters**
  - **Physical state** liquid
  - **Concentration of the substance in the mixture** ≤ 100 %
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
  - Avoid contact with the skin.
  - Do not inhale gases/vapour/aerosol.
  - Take precautionary measures against static discharge.
  - Keep away from sources of ignition - No smoking.
  - Covers use at ambient temperatures + max. 20 °C.
- **Other operational conditions affecting consumer exposure** Oral absorption is not expected.
- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
  - **Worker protection**
    - **Organisational protective measures**
      - Ensure that activities are executed by specialists or authorised personnel only.
    - **Technical protective measures**
      - Provide explosion-proof electrical equipment.
      - Ensure that suitable extractors are available on processing machines.
      - (not less than 10 - 15 air changes per hour)
      - Empty and flush systems before commissioning or servicing equipment.
      - Clean transport lines before decoupling.
      - Use enclosed means of conveyance.
    - **Personal protective measures**
      - Do not inhale gases / fumes / aerosols.
      - Avoid contact with the skin.
      - If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
      - Solvent resistant gloves.
  - **Measures for consumer protection** Ensure adequate labelling.
- **Environmental protection measures**
  - **Water** Do not allow to reach ground water, water bodies or sewage system.
  - **Disposal measures** Ensure that waste is collected and contained.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Methanol

- **Disposal procedures**
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Waste type**
  Partially emptied and uncleaned packaging

- **Exposure estimation**
The exposure estimation was carried out in accordance with ECETOC TRA.

- **Worker (oral)**
  No significant oral exposure

- **Worker (dermal)**
The calculated value is smaller than the DNEL.

- **Worker (inhalation)**
The calculated value is smaller than the DNEL.

- **Environment**
  No further relevant information available.

- **Consumer**
  No further relevant information available.

**Guidance for downstream users**

Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.

For the risk assessment, the tools recommended by ECHA can be used.
Annex: Exposure scenario 15

- **Short title of the exposure scenario** ES 15: Use in detergents - professional
- **Sector of Use**
  - SU22  Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Process category**
  - PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
  - PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
  - PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
  - PROC4 Chemical production where opportunity for exposure arises
  - PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
  - PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
  - PROC10 Roller application or brushing
  - PROC11 Non industrial spraying
  - PROC13 Treatment of articles by dipping and pouring
- **Environmental release category**
  - ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
  - ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
- **Description of the activities / processes covered in the Exposure Scenario**
  See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
  - Duration and frequency 8hrs (full working shift).
  - Worker Avoid activities involving exposure for more than 4 h.
- **Physical parameters**
  - Physical state liquid
  - Concentration of the substance in the mixture
    - ≤ 100 %
    - PROC 8a, 8b, 10, 11: ≤ 5 %
- **Other operational conditions**
  - Other operational conditions affecting environmental exposure No special measures required.
  - Other operational conditions affecting worker exposure
    - Avoid contact with the skin.
    - Do not breathe gas/vapour/aerosol.
    - Take precautionary measures against static discharge.
    - Keep away from sources of ignition - No smoking.
    - Covers use at ambient temperatures + max. 20 °C.
  - Other operational conditions affecting consumer exposure Oral absorption is not expected.
  - Other operational conditions affecting consumer exposure during the use of the product Not applicable.
- **Risk management measures**
  - Worker protection
    - Provide explosion-proof electrical equipment.
    - Ensure that suitable extractors are available on processing machines.
**Personal protective measures**
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
Solvent resistant gloves.

**Measures for consumer protection**
Ensure adequate labelling.

**Environmental protection measures**
- **Water** Do not allow to reach ground water, water bodies or sewage system.
- **Disposal measures** Ensure that waste is collected and contained.

**Disposal procedures**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Exposure estimation**
The exposure estimation was carried out in accordance with ECETOC TRA.
- **Worker (oral)** No significant oral exposure
- **Worker (dermal)** The calculated value is smaller than the DNEL.
- **Worker (inhalation)** The calculated value is smaller than the DNEL.
- **Environment** No further relevant information available.
- **Consumer** No further relevant information available.

**Guidance for downstream users**
Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.
For the risk assessment, the tools recommended by ECHA can be used.