Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

WD-40® MULTI-USE PRODUCT - [Aerosol]

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

Relevant identified uses of the substance or mixture:
Corrosion protection
Lubricant

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

WD-40 Company Limited, PO Box 440, Kiln Farm, Milton Keynes, MK11 3LF, United Kingdom
Phone:+44 (0) 1908 555400, Fax:+44 (0) 1908 266900
www.wd40.co.uk

P.R. Rielly Limited KarKraft House, Kilbarrack Industrial Estate, Kilbarrack, Dublin 5, Ireland
Phone:01-832 0006, Fax:01-832 0016
web@team.ie

Danka Import Export, 548 St Joseph High Road, SVR 1018 St Venera, Malta
Phone:+356 21233649, Fax:+356 21233501
Danka@maltanet.net

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Medicines & Poisons Info Office - Mater Dei Hospital, Msida MSD 2090, Malta - Tel.: 2545 6504
Emergency Ambulance - Tel.: 112

National Poisons Information Centre, Beaumont Hospital, Dublin 9, Ireland, Tel.:
+353 (0)1 809 2166 (Public Poisons Info Line, 8am-10pm, 7 days a week)
+353 (0)1 809 2566 (Info for Healthcare Professionals ONLY, 24 h, 7 days a week)

Telephone number of the company in case of emergencies:
+49 (0) 700 / 24 112 112 (WDC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

<table>
<thead>
<tr>
<th>Hazard class</th>
<th>Hazard category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOT SE</td>
<td>3</td>
<td>H336-May cause drowsiness or dizziness.</td>
</tr>
<tr>
<td>Aerosol</td>
<td>1</td>
<td>H222-Extremely flammable aerosol.</td>
</tr>
<tr>
<td>Asp. Tox.</td>
<td>1</td>
<td>H304-May be fatal if swallowed and enters airways.</td>
</tr>
<tr>
<td>Aerosol</td>
<td>1</td>
<td>H229-Pressurised container: May burst if heated.</td>
</tr>
</tbody>
</table>

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)
H336-May cause drowsiness or dizziness.  H222-Extremely flammable aerosol.  H229-Pressurised container: May burst if heated.

P101-If medical advice is needed, have product container or label at hand.  P102-Keep out of reach of children.
P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  P211-Do not spray on an open flame or other ignition source.  P251-Do not pierce or burn, even after use.  P261-Avoid breathing vapours or spray.  P271-Use only outdoors or in a well-ventilated area.  P301+P310+P331-IF SWALLOWED: Immediately call a POISON CENTER / doctor. Do NOT induce vomiting.  P312-Call a POISON CENTRE / doctor if you feel unwell.  P405-Store locked up.  P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C.  P501-Dispose of contents / container safely.

EUH066-Repeated exposure may cause skin dryness or cracking.

Without adequate ventilation, formation of explosive mixtures may be possible. Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

2.3 Other hazards
The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
Danger of bursting (explosion) when heated
Hydrocarbons can be harmful to water.
Product can compose a film on the water surface, which can prevent oxygen exchange.

SECTION 3: Composition/information on ingredients

Aerosol

3.1 Substance
n.a.

3.2 Mixture

<table>
<thead>
<tr>
<th>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</th>
<th>Registration number (REACH)</th>
<th>01-2119463258-33-XXXX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>EINECS, ELINCS, NLP</td>
<td>919-857-5 (REACH-IT List-No.)</td>
<td>---</td>
</tr>
<tr>
<td>CAS</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>content %</td>
<td>60-80</td>
<td>---</td>
</tr>
</tbody>
</table>

Classification according to Regulation (EC) 1272/2008 (CLP)
Flam. Liq. 3, H226
Asp. Tox. 1, H304
STOT SE 3, H336

Carbon dioxide

| Substance for which an EU exposure limit value applies. | Registration number (REACH) | --- |
| Index | --- | --- |
| EINECS, ELINCS, NLP | 204-696-9 | --- |
| CAS | 124-38-9 | --- |
| content % | 1-5 | --- |

Classification according to Regulation (EC) 1272/2008 (CLP) | --- | --- |
For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.
If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here.
Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0.1 % w/w benzene (EINECS No 200-753-7)."
Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation
Supply person with fresh air.
Remove person from danger area.
Respiratory arrest - Artificial respiration apparatus necessary.

Skin contact
Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion
Rinse the mouth thoroughly with water.
Consult doctor immediately - keep Data Sheet available.
Do not induce vomiting.
Danger of aspiration

4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
The following may occur:
Irritation of the eyes
Inhalation:
Headaches
Nausea
Dizziness
Irritation of the respiratory tract
Effects/damages the central nervous system
With long-term contact:
Dermatitis (skin inflammation)
Ingestion:
Nausea
Vomiting
Diarrhoea
Danger of aspiration
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed
n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Foam
CO2
Extinction powder
Water jet spray

Unsuitable extinguishing media
High volume water jet

5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Danger of bursting (explosion) when heated
Danger of explosion by prolonged heating. Explosive vapour/air mixture

5.3 Advice for firefighters
According to size of fire
Protective respirator with independent air supply.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Remove possible causes of ignition - do not smoke.
Ensure sufficient supply of air.
Avoid inhalation, and contact with eyes or skin.
Do not carry cleaning cloths soaked in product in trouser pockets.

6.2 Environmental precautions
If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent from entering drainage system.
Prevent surface and ground-water infiltration, as well as ground penetration.

6.3 Methods and material for containment and cleaning up
If spray or gas escapes, ensure ample fresh air is available.
Active substance: Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

6.4 Reference to other sections
For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling
7.1.1 General recommendations
Ensure good ventilation.
Keep away from sources of ignition - Do not smoke.
Do not use on hot surfaces.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.
Take measures against electrostatic charging, if appropriate.

7.1.2 Notes on general hygiene measures at the workplace
General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities
Keep out of access to unauthorised individuals.
Not to be stored in gangways or stair wells.
Observe special regulations for aerosols!
Observe special storage conditions.
Keep protected from direct sunlight and temperatures over 50°C.
Store in a dry place.
Store cool.
Store in a well ventilated place.

7.3 Specific end use(s)
No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3
### Chemical Name: Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

<table>
<thead>
<tr>
<th></th>
<th>Content %: 60-80</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL-TWA:</td>
<td>800 mg/m³</td>
</tr>
<tr>
<td>WEL-STEL:</td>
<td>---</td>
</tr>
</tbody>
</table>

**Monitoring procedures:**
- Draeger - Hydrocarbons 2/a (81 03 581)
- Draeger - Hydrocarbons 0,1%/c (81 03 571)
- Compur - KITA-187 S (551 174)

**BMGV:**

Other information: 
(WEL acc. to RCP-method, EH40)

### Chemical Name: Carbon dioxide

<table>
<thead>
<tr>
<th></th>
<th>Content %: 1-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL-TWA:</td>
<td>5000 ppm (9150 mg/m³) (WEL), 5000 ppm (9000 mg/m³) (EU)</td>
</tr>
<tr>
<td>WEL-STEL:</td>
<td>15000 ppm (27400 mg/m³) (WEL)</td>
</tr>
</tbody>
</table>

**Monitoring procedures:**
- Compur - KITA-126 B (549 475)
- Compur - KITA-126 SA (549 467)
- Compur - KITA-126 SB (548 816)
- Compur - KITA-126 SF (549 491)
- Compur - KITA-126 SG (550 210)
- Compur - KITA-126 SH (549 509)
- Compur - KITA-126 UH (549 517)
- Draeger - Carbon Dioxide 100/a (81 01 811)
- Draeger - Carbon Dioxide 0,1%/a (CH 23 501)
- Draeger - Carbon Dioxide 0,5%/a (CH 31 401)
- Draeger - Carbon Dioxide 1%/a (CH 25 101)
- Draeger - Carbon Dioxide 5%/A (CH 20 301)
- OSHA ID-172 (Carbon dioxide in workplace atmospheres) - 1990
- NIOSH 6603 (Carbon dioxide) - 1994

**BMGV:**

Other information: 
IOELV
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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 07.03.2017 / 0005
Replacing version dated / version: 28.02.2017 / 0004
Valid from: 07.03.2017
PDF print date: 09.03.2017
WD-40® MULTI-USE PRODUCT - [Aerosol]

- Draeger - Carbon Dioxide 1%/a (CH 25 101)
- Draeger - Carbon Dioxide 5%/A (CH 20 301)
- OSHA ID-172 (Carbon dioxide in workplace atmospheres) - 1990
- NIOSH 6603 (Carbon dioxide) - 1994

BMGV: ---
Other information: ---

Chemical Name

WEL-TWA: 5 mg/m3 (ACGIH)
WEL-STEL: 10 mg/m3 (ACGIH)

Monitoring procedures:
- Draeger - Oil 10/a-P (67 28 371)
- Draeger - Oil Mist 1/a (67 33 031)

BMGV: ---
Other information: ---

Chemical Name

OELV-8h: 5 mg/m3 (Mineral oil, pure, highly & severely refined (inhalable))

Monitoring procedures:
- Draeger - Oil 10/a-P (67 28 371)
- Draeger - Oil Mist 1/a (67 33 031)

BLV: ---
Other information: ---

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Area of application
Consumer
Consumer
Consumer
Workers / employees
Workers / employees

Exposure route / Environmental compartment
- oral
- dermal
- inhalation
- dermal
- inhalation

Effect on health
Long term, systemic effects
Long term, systemic effects
Long term, systemic effects
Long term, systemic effects
Long term, systemic effects

Descripto
DNEL
DNEL
DNEL
DNEL
DNEL

Value
300 mg/kg bw/day
300 mg/kg bw/day
900 mg/m3
300 mg/kg bw/day
1500 mg/m3

Unit
mg/kg bw/day
mg/kg bw/day
mg/m3
mg/kg bw/day
mg/m3

Note

8.2 Exposure controls
8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.
Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
These are specified by e.g. EN 14042.
EN 14042 “Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents”.

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8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and at end of work. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
Protective nitrile gloves (EN 374)
Minimum layer thickness in mm:
>= 0,4
Permeation time (penetration time) in minutes:
>= 480
The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended.

Skin protection - Other:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
Normally not necessary.
If OES or MEL is exceeded.
Filter A P3 (EN 14387), code colour brown, white
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls
No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Light brown</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH-value</td>
<td>n.a.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>&lt;= -66 °C (ASTM D 97, Liquid concentrate)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>176 °C (Liquid concentrate )</td>
</tr>
<tr>
<td>Flash point</td>
<td>47 °C (Liquid concentrate )</td>
</tr>
<tr>
<td>Flash point: Enclosed space ignition test (UN RTDG, Manual of Tests and Criteria, Part III, 31.5): &lt;= 300 g/m³ (deflagration density)</td>
<td>Enclosed space ignition test (UN RTDG, Manual of Tests and Criteria, Part III, 31.5): &lt;= 300 s/m³ (time equivalent)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Yes</td>
</tr>
<tr>
<td>Lower explosive limit:</td>
<td>0,6 Vol-% ((Particulars of main substances contained) )</td>
</tr>
<tr>
<td>Upper explosive limit:</td>
<td>8,0 Vol-% ((Particulars of main substances contained) )</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>7,2 bar (20°C)</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>9,4 bar (50°C)</td>
</tr>
</tbody>
</table>
Vapour density (air = 1): Not determined
Density: 0.817 g/ml (Liquid concentrate)
Bulk density: n.a.
Solubility(ies): Not determined
Water solubility: Insoluble
Partition coefficient (n-octanol/water): Not determined
Auto-ignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: <1 cSt
Explosive properties: Not determined
Oxidising properties: No

9.2 Other information
Miscibility: Not determined
Fat solubility / solvent: Not determined
Conductivity: Not determined
Surface tension: Not determined
Solvents content: Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity
The product has not been tested.

10.2 Chemical stability
Stable with proper storage and handling.

10.3 Possibility of hazardous reactions
No dangerous reactions are known.

10.4 Conditions to avoid
See also section 7.
Heating, open flame, ignition sources
Pressure increase will result in danger of bursting.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

10.5 Incompatible materials
See also section 7.
Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products
See also Subsection 10.1 to 10.5.
See also section 5.2
No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Possibly more information on health effects, see Section 2.1 (classification).

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity, by dermal route:</td>
<td>n.d.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td>n.d.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin corrosion/irritation:</td>
<td>n.d.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation:</td>
<td>n.d.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitisation:</td>
<td>n.d.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity:</td>
<td>n.d.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity:</td>
<td>n.d.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity:</td>
<td>n.d.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard:</td>
<td>n.d.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity, by oral route:</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
<td>Rat</td>
<td>OECD 401 (Acute Oral Toxicity)</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
<td>Rabbit</td>
<td>OECD 402 (Acute Dermal Toxicity)</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td>LC50</td>
<td>&gt;5000</td>
<td>mg/m³/8 h</td>
<td>Rat</td>
<td>OECD 403 (Acute Inhalation Toxicity)</td>
<td>Not irritant, Repeated exposure may cause skin dryness or cracking.</td>
</tr>
</tbody>
</table>

### Skin corrosion/irritation:

- Rabbit OECD 404 (Acute Dermal Irritation/Corrosion)
  - Not irritant, Repeated exposure may cause skin dryness or cracking.

### Serious eye damage/irritation:

- Rabbit OECD 405 (Acute Eye Irritation/Corrosion)
  - Not irritant

### Respiratory or skin sensitisation:

- Guinea pig OECD 406 (Skin Sensitisation)
  - No (skin contact)

### Germ cell mutagenicity:

- OECD 471 (Bacterial Reverse Mutation Test)
  - Negative, Analogous conclusion

### Carcinogenicity:

- OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)
  - Negative, Analogous conclusion

### Reproductive toxicity:

- OECD 414 (Prenatal Developmental Toxicity Study)
  - Negative, Analogous conclusion

### Specific target organ toxicity - single exposure (STOT-SE):

- May cause drowsiness or dizziness.

### Aspiration hazard:

- Yes

### Symptoms:

- unconsciousness, headaches, dizziness, reddening of the skin

### Specific target organ toxicity - repeated exposure (STOT-RE), oral:

- OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
  - Not to be expected

### Carbon dioxide

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>unconsciousness, blisters by skin-contact, vomiting, frostbite, annoyance, palpitations, itching, headaches, cramps, ear noises, dizziness</td>
</tr>
</tbody>
</table>
### SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.2. Persistence and degradability:</td>
<td>28d</td>
<td>&gt;20-</td>
<td>&lt;60</td>
<td>%</td>
<td></td>
<td>OECD 310 (Ready Biodegradability - CO2 in sealed vessels (Headspace Test))</td>
<td>Not readily but inherent biodegradable.</td>
</tr>
<tr>
<td>12.5. Results of PBT and vPvB assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
</tr>
<tr>
<td>12.6. Other adverse effects:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
</tr>
</tbody>
</table>

### Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>LC50</td>
<td>96h</td>
<td>&gt;1000</td>
<td>mg/l</td>
<td>Oncorhynchus mykiss</td>
<td>OECD 203 (Fish, Acute Toxicity Test)</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>NOELR</td>
<td>28d</td>
<td>0,13</td>
<td>mg/l</td>
<td>Oncorhynchus mykiss</td>
<td>QSAR</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to daphnia:</td>
<td>EC50</td>
<td>48h</td>
<td>&gt;1000</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>OECD 202 (Daphnia sp. Acute Immobilisation Test)</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to daphnia:</td>
<td>NOELR</td>
<td>21d</td>
<td>0,23</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>QSAR</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to algae:</td>
<td>NOELR</td>
<td>72h</td>
<td>100</td>
<td>mg/l</td>
<td>Pseudokirchnerie lla subcapitata</td>
<td>OECD 201 (Alga, Growth Inhibition Test)</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to algae:</td>
<td>ErC50</td>
<td>72h</td>
<td>&gt;1000</td>
<td>mg/l</td>
<td>Pseudokirchnerie lla subcapitata</td>
<td>OECD 201 (Alga, Growth Inhibition Test)</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to algae:</td>
<td>EbC50</td>
<td>72h</td>
<td>&gt;1000</td>
<td>mg/l</td>
<td>Pseudokirchnerie lla subcapitata</td>
<td>OECD 201 (Alga, Growth Inhibition Test)</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to algae:</td>
<td>ErC50</td>
<td>72h</td>
<td>&gt;1000</td>
<td>mg/l</td>
<td>Pseudokirchnerie lla subcapitata</td>
<td>OECD 201 (Alga, Growth Inhibition Test)</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to algae:</td>
<td>EbC50</td>
<td>72h</td>
<td>&gt;1000</td>
<td>mg/l</td>
<td>Pseudokirchnerie lla subcapitata</td>
<td>OECD 201 (Alga, Growth Inhibition Test)</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to algae:</td>
<td>NOELR</td>
<td>72h</td>
<td>100</td>
<td>mg/l</td>
<td>Raphidocelis subcapitata</td>
<td>OECD 201 (Alga, Growth Inhibition Test)</td>
<td></td>
</tr>
<tr>
<td>12.2. Persistence and degradability:</td>
<td>28d</td>
<td>80</td>
<td>%</td>
<td></td>
<td></td>
<td>OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)</td>
<td>Readily biodegradable</td>
</tr>
<tr>
<td>12.5. Results of PBT and vPvB assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No PBT substance, No vPvB substance</td>
</tr>
</tbody>
</table>
12.1. Toxicity to fish: LC50 96h 35 mg/l *Salmo gairdneri*

### Toxicity / effect

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish:</td>
<td>LC50</td>
<td>96h</td>
<td>35</td>
<td>mg/l</td>
<td><em>Salmo gairdneri</em></td>
<td></td>
</tr>
<tr>
<td>Other adverse effects:</td>
<td>Log Kow</td>
<td>0.83</td>
<td></td>
<td></td>
<td>Greenhouse effect</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

**For the substance / mixture / residual amounts**

**EC disposal code no.:**

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

- **16 05 04 gases in pressure containers (including halons) containing hazardous substances**
  - Recommendation: Sewage disposal shall be discouraged.
  - Pay attention to local and national official regulations.
  - E.g. suitable incineration plant.

**For contaminated packing material**

Pay attention to local and national official regulations.

- **15 01 04 metallic packaging**
- **15 01 01 paper and cardboard packaging**

Dispose using dual system.

**SECTION 14: Transport information**

### General statements

**14.1. UN number:** 1950

**Transport by road/by rail (ADR/RID)**

**14.2. UN proper shipping name:**

UN 1950 AEROSOLS

**14.3. Transport hazard class(es):** 2.1

**14.4. Packing group:** -

**Classification code:** 5F

**LO:** 1 L

**14.5. Environmental hazards:** Not applicable

**Tunnel restriction code:** D

**Transport by sea (IMDG-code)**

**14.2. UN proper shipping name:**

AEROSOLS

**14.3. Transport hazard class(es):** 2.1

**14.4. Packing group:** -

**EmS:** F-D, S-U

**Marine Pollutant:** n.a

**14.5. Environmental hazards:** Not applicable

**Transport by air (IATA)**

**14.2. UN proper shipping name:**

Aerosols, flammable

**14.3. Transport hazard class(es):** 2.1

**14.4. Packing group:** -

**14.5. Environmental hazards:** Not applicable

### 14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained.

All persons involved in transporting must observe safety regulations.

Precautions must be taken to prevent damage.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Freighted as packaged goods rather than in bulk, therefore not applicable.

Minimum amount regulations have not been taken into account.

Danger code and packing code on request.
Comply with special provisions.

SECTION 15: Regulatory information

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

Observe restrictions:
Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): ~ 65.5 %

Observe youth employment law (German regulation).

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

EUF0002
Revised sections: 2,16
These details refer to the product as it is delivered.
Employee instruction/training in handling hazardous materials is required.
Employee training in handling dangerous goods is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

<table>
<thead>
<tr>
<th>Classification in accordance with regulation (EC) No. 1272/2008 (CLP)</th>
<th>Evaluation method used</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOT SE 3, H336</td>
<td>Classification according to calculation procedure.</td>
</tr>
<tr>
<td>Aerosol 1, H222</td>
<td>Classification based on test data.</td>
</tr>
<tr>
<td>Asp. Tox. 1, H304</td>
<td>Classification according to calculation procedure.</td>
</tr>
<tr>
<td>Aerosol 1, H229</td>
<td>Classification based on test data.</td>
</tr>
</tbody>
</table>

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.

STOT SE — Specific target organ toxicity - single exposure - narcotic effects
Aerosol — Aerosols
Asp. Tox. — Aspiration hazard
Flam. Liq. — Flammable liquid

Any abbreviations and acronyms used in this document:

AC Article Categories
acc., acc. to according, according to
ACGIH American Conference of Governmental Industrial Hygienists
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOEL Acceptable Operator Exposure Level
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BauA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCF Bioconcentration factor
BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)
BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)
BMGV Biological monitoring guidance value (EH40, UK)
BOD Biochemical oxygen demand
BSEF Bromine Science and Environmental Forum
bw body weight
CAS Chemical Abstracts Service
CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids
CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques
CIPAC Collaborative International Pesticides Analytical Council
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
COD Chemical oxygen demand
CTFA Cosmetic, Toiletry, and Fragrance Association
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon
DT50 Dwell Time - 50% reduction of start concentration
DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EC European Community
ECHA European Chemicals Agency
EEA European Economic Area
EEC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
ERC Environmental Release Categories
ES Exposure scenario
e.tc. et cetera
EU European Union
EWC European Waste Catalogue
Fax Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
HET-CAM Hen's Egg Test - Chorionallantoic Membrane
HGWP Halocarbon Global Warming Potential
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
LC lethal concentration
LC50 lethal concentration 50 percent kill
LCLo lowest published lethal concentration
LD Lethal Dose of a chemical
LD50 Lethal Dose, 50% kill
LDLo Lethal Dose Low
LOAEL Lowest Observed Adverse Effect Level
LOEC Lowest Observed Effect Concentration
LOEL Lowest Observed Effect Level
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute of Occupational Safety and Health (United States of America)
NOAEC No Observed Adverse Effective Concentration
NOAEL No Observed Adverse Effect Level
NOEC No Observed Effect Concentration
NOEL No Observed Effect Level
The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:
**Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90**

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