# 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®BIKE® All Conditions Lube

### 1.2 Relevant identified uses of the substance or mixture and uses advised against
**Relevant identified uses of the substance or mixture:**
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
IRL

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

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:**
IRL

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)**

| Hazard class | Hazard category | Hazard statement |
|---|---|---|
| STOT SE | 3 | H336-May cause drowsiness or dizziness. |
| Aerosol | 1 | H222-Extremely flammable aerosol. |
| Asp. Tox. | 1 | H304-May be fatal if swallowed and enters airways. |
| Aerosol | 1 | H229-Pressurised container: May burst if heated. |

### 2.2 Label elements
**Labeling according to Regulation (EC) 1272/2008 (CLP)**

Danger

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.
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
Hydrocarbons, C6, isoalkanes, < 5% n-hexane

### 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 %).

## SECTION 3: Composition/information on ingredients

Aerosol

### 3.1 Substance

n.a.

### 3.2 Mixture

| **Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics** | |
|---|---|
| **Registration number (REACH)** | 01-2119463258-33-XXXX |
| **Index** | --- |
| **EINECS, ELINCS, NLP** | 919-857-5 (REACH-IT List-No.) |
| **CAS** | --- |
| **content %** | 40-60 |
| **Classification according to Regulation (EC) 1272/2008 (CLP)** | Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>STOT SE 3, H336 |

| **Petroleum gases, liquified** | |
|---|---|
| **Registration number (REACH)** | --- |
| **Index** | 649-202-00-6 |
| **EINECS, ELINCS, NLP** | 270-704-2 |
| **CAS** | 68476-85-7 |
| **content %** | 10-40 |
| **Classification according to Regulation (EC) 1272/2008 (CLP)** | Flam. Gas 1, H220 |

| **2-(2-butoxyethoxy)ethanol** | **Substance for which an EU exposure limit value applies.** |
|---|---|
| **Registration number (REACH)** | --- |
| **Index** | 603-096-00-8 |
| **EINECS, ELINCS, NLP** | 203-961-6 |
| **CAS** | 112-34-5 |
| **content %** | 1-5 |
| **Classification according to Regulation (EC) 1272/2008 (CLP)** | Eye Irrit. 2, H319 |

| **Hydrocarbons, C6, isoalkanes, < 5% n-hexane** | |
|---|---|
| **Registration number (REACH)** | 01-2119484651-34-XXXX |
| **Index** | --- |
| **EINECS, ELINCS, NLP** | 931-254-9 (REACH-IT List-No.) |

| | |
|---|---|
| **CAS** | (64742-49-0) |
| **content %** | 1-<2,5 |
| **Classification according to Regulation (EC) 1272/2008 (CLP)** | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>STOT SE 3, H336<br>Aquatic Chronic 2, H411 |

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

Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.
If the person is unconscious, place in a stable side position and consult a doctor.

#### 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

Typically no exposure pathway.
Rinse the mouth thoroughly with water.
Do not induce vomiting. Consult doctor immediately.

### 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.
At high concentrations:
Irritation of the respiratory tract
Coughing
Dizziness
Headaches
Effect on the central nervous system
Coordination disorders
Unconsciousness
Other dangerous properties cannot be ruled out.
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

CO2
Extinction powder
Water jet spray
Large fire:
Water jet spray / alcohol resistant foam

#### 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
Toxic gases
Danger of bursting (explosion) when heated
Explosive vapour/air mixture

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
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 contact with eyes or skin.
If applicable, caution - risk of slipping.

### 6.2 Environmental precautions

Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.
If accidental entry into drainage system occurs, inform responsible authorities.

### 6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.
Without adequate ventilation, formation of explosive mixtures may be possible.
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.
Avoid inhalation of the vapours.
Keep away from sources of ignition - Do not smoke.
Take measures against electrostatic charging, if appropriate.
Do not use on hot surfaces.
Avoid contact with eyes or skin.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.

#### 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.
Store product closed and only in original packing.
Not to be stored in gangways or stair wells.
Do not store with oxidizing agents.
Observe special regulations for aerosols!
Observe special storage conditions.
Keep protected from direct sunlight and temperatures over 50°C.
Store in a well ventilated place.
Store in a dry 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

| GB | Chemical Name | Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics | Content %:40-60 |
|---|---|---|---|
| WEL-TWA: 800 mg/m3 | WEL-STEL: --- | --- | |
| Monitoring procedures: | - Draeger - Hydrocarbons 2/a (81 03 581)<br>- Draeger - Hydrocarbons 0,1%/c (81 03 571)<br>- Compur - KITA-187 S (551 174) | | |
| BMGV: --- | Other information: (WEL acc. to RCP-method, EH40) | | |

| IRL | Chemical Name | Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics | Content %:40-60 |
|---|---|---|---|
| OELV-8h: 100 ppm (573 mg/m3) (White Spirit ) | OELV-15min: 125 ppm (720 mg/m3) (White Spirit ) | --- | |
| Monitoring procedures: | - Draeger - Hydrocarbons 2/a (81 03 581)<br>- Draeger - Hydrocarbons 0,1%/c (81 03 571)<br>- Compur - KITA-187 S (551 174) | | |
| BLV: --- | Other information: --- | | |

| GB | Chemical Name | Petroleum gases, liquified | Content %:10-40 |
|---|---|---|---|
| WEL-TWA: 1000 ppm (1750 mg/m3) (Liquefied petroleum gas (LPG)) | WEL-STEL: 1250 ppm (2180 mg/m3) (Liquefied petroleum gas (LPG)) | --- | |
| Monitoring procedures: | --- | | |
| BMGV: --- | Other information: --- | | |

| IRL | Chemical Name | Petroleum gases, liquified | Content %:10-40 |
|---|---|---|---|
| OELV-8h: 1000 ppm (1800 mg/m3) | OELV-15min: 1250 ppm (2250 mg/m3) | --- | |
| Monitoring procedures: | --- | | |
| BLV: --- | Other information: --- | | |

| GB | Chemical Name | 2-(2-butoxyethoxy)ethanol | Content %:1-5 |
|---|---|---|---|
| WEL-TWA: 10 ppm (67,5 mg/m3) (WEL, EU) | WEL-STEL: 15 ppm (101,2 mg/m3) (WEL, EU) | --- | |
| Monitoring procedures: | --- | | |
| BMGV: --- | Other information: --- | | |

| IRL | Chemical Name | 2-(2-butoxyethoxy)ethanol | Content %:1-5 |
|---|---|---|---|
| OELV-8h: 10 ppm (67,5 mg/m3) (OELV, EC) | OELV-15min: 15 ppm (101,2 mg/m3) (OELV, EC) | --- | |
| Monitoring procedures: | --- | | |
| BLV: --- | Other information: IOELV | | |

| GB | Chemical Name | Hydrocarbons, C6, isoalkanes, < 5% n-hexane | Content %:1-<2,5 |
|---|---|---|---|
| WEL-TWA: 800 mg/m3 | WEL-STEL: --- | --- | |
| Monitoring procedures: | - Draeger - Hydrocarbons 2/a (81 03 581)<br>- Draeger - Hydrocarbons 0,1%/c (81 03 571)<br>- Compur - KITA-187 S (551 174) | | |
| BMGV: --- | Other information: (WEL acc. to RCP-method, EH40) | | |

| IRL | Chemical Name | Hydrocarbons, C6, isoalkanes, < 5% n-hexane | Content %:1-<2,5 |
|---|---|---|---|
| OELV-8h: 1200 mg/m3 (AGW) | OELV-15min: 2(II) (AGW) | --- | |
| Monitoring procedures: | - Draeger - Hydrocarbons 2/a (81 03 581)<br>- Draeger - Hydrocarbons 0,1%/c (81 03 571)<br>- Compur - KITA-187 S (551 174) | | |
| BLV: --- | Other information: --- | | |

| GB | Chemical Name | Oil mist, mineral | Content %: |
|---|---|---|---|
| WEL-TWA: 5 mg/m3 (ACGIH) | WEL-STEL: 10 mg/m3 (ACGIH) | --- | |
| Monitoring procedures: | - Draeger - Oil 10/a-P (67 28 371)<br>- Draeger - Oil Mist 1/a (67 33 031) | | |

| BMGV: --- | Other information: --- |
|---|---|

| IRL **Chemical Name** | Oil mist, mineral | Content %: |
|---|---|---|
| OELV-8h: 5 mg/m3 (Mineral oil, pure, highly & severely refined (inhalable)) | OELV-15min: --- | --- |
| Monitoring procedures: | - Draeger - Oil 10/a-P (67 28 371)<br>- Draeger - Oil Mist 1/a (67 33 031) | |
| BLV: --- | Other information: --- | |

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

IRL OELV-8h = Occupational Exposure Limit Value (8-hour reference period). (IFV) = Inhalable Fraction and Vapour. (I) = Inhalable Fraction. (R) = Respirable Fraction. | OELV-15min = Occupational Exposure Limit Value (15-minute reference period). (IFV) = Inhalable Fraction and Vapour. (I) = Inhalable Fraction. (R) = Respirable Fraction. | BLV = Biological limit value | Other information: Carc1A, Carc1B = carcinogenic substance, Cat. 1A or 1B. Muta1A, Muta1B = mutagenic substance, Cat. 1A or 1B. Repr1A, Repr1B = Substances known to be toxic for reproduction, Cat. 1A or 1B. Sk = can be absorbed through skin. Asphx = asphyxiant. Sen = Respiratory sensitizer. BOELV = Binding Occupational Exposure Limit Values. IOELV = Indicative Occupational Exposure Limit Values.

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

| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
|---|---|---|---|---|---|---|
| Consumer | Human - oral | Long term, systemic effects | DNEL | 300 | mg/kg bw/day | |
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 300 | mg/kg bw/day | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 900 | mg/m3 | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 300 | mg/kg bw/day | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 1500 | mg/m3 | |

**2-(2-butoxyethoxy)ethanol**

| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
|---|---|---|---|---|---|---|
| | Environment - freshwater | | PNEC | 1,1 | mg/l | |
| | Environment - marine | | PNEC | 0,11 | mg/l | |
| | Environment - water, sporadic (intermittent) release | | PNEC | 11 | mg/l | |
| | Environment - sediment, freshwater | | PNEC | 4,4 | mg/kg | |
| | Environment - sediment, marine | | PNEC | 0,44 | mg/kg | |
| | Environment - soil | | PNEC | 0,32 | mg/kg | |
| | Environment - sewage treatment plant | | PNEC | 200 | mg/l | |
| Consumer | Human - inhalation | Short term, local effects | DNEL | 60,7 | mg/m3 | |
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 50 | mg/kg bw/d | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 40,5 | mg/m3 | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 5 | mg/kg bw/d | |
| Consumer | Human - inhalation | Long term, local effects | DNEL | 60,7 | mg/m3 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Workers / employees | Human - oral | Long term, local effects | DNEL | 67,5 | mg/m3 | |
| Workers / employees | Human - dermal | Short term, systemic effects | DNEL | 89 | mg/kg bw/d | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 83 | mg/kg bw/d | |
| Workers / employees | Human - inhalation | Short term, local effects | DNEL | 101,2 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 67,5 | mg/m3 | |

| **Hydrocarbons, C6, isoalkanes, < 5% n-hexane** | | | | | | |
|---|---|---|---|---|---|---|
| **Area of application** | **Exposure route / Environmental compartment** | **Effect on health** | **Descriptor** | **Value** | **Unit** | **Note** |
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 1377 | mg/kg bw/d | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 1301 | mg/kg bw/d | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 1131 | mg/m3 | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 13964 | mg/kg bw/d | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 5306 | mg/m3 | |

## 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".

## 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:
Chemical resistant protective gloves (EN 374).
If applicable
Protective nitrile gloves (EN 374)
Protective gloves made of polyvinyl alcohol (EN 374)
Protective Viton® / fluoroelastomer gloves (EN 374)
Minimum layer thickness in mm:
0,5
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:
If OES or MEL is exceeded.

Filter A2 P2 (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

| | |
|---|---|
| Physical state: | Aerosol. Active substance: liquid. |
| Colour: | Light yellow |
| Odour: | Perfumed |
| Odour threshold: | Not determined |
| pH-value: | Not determined |
| Melting point/freezing point: | Not determined |
| Initial boiling point and boiling range: | Not determined |
| Flash point: | Not determined |
| Evaporation rate: | Not determined |
| Flammability (solid, gas): | Not determined |
| Lower explosive limit: | Not determined |
| Upper explosive limit: | Not determined |
| Vapour pressure: | Not determined |
| Vapour density (air = 1): | Not determined |
| Density: | Not determined |
| Bulk density: | n.a. |
| Solubility(ies): | Not determined |
| Water solubility: | Not determined |
| Partition coefficient (n-octanol/water): | Not determined |
| Auto-ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| Viscosity: | Not determined |
| Explosive properties: | Product is not explosive. When using: development of explosive vapour/air mixture possible. |
| 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
Heating, open flame, ignition sources
Pressure increase will result in danger of bursting.

### 10.5 Incompatible materials
Avoid contact with strong oxidizing agents.
Avoid contact with strong alkalis.
Avoid contact with strong acids.

### 10.6 Hazardous decomposition products
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).

| **WD-40®BIKE® All Conditions Lube** | | | | | | |
|---|---|---|---|---|---|---|
| **Toxicity / effect** | **Endpoint** | **Value** | **Unit** | **Organism** | **Test method** | **Notes** |
| Acute toxicity, by oral route: | | | | | | n.d.a. |
| Acute toxicity, by dermal route: | | | | | | n.d.a. |
| Acute toxicity, by inhalation: | | | | | | n.d.a. |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |
| Respiratory or skin sensitisation: | | | | | | n.d.a. |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | n.d.a. |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | | n.d.a. |
| Aspiration hazard: | | | | | | n.d.a. |
| Symptoms: | | | | | | n.d.a. |
| Other information: | | | | | | Classification according to calculation procedure. |

| **Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics** | | | | | | |
|---|---|---|---|---|---|---|
| **Toxicity / effect** | **Endpoint** | **Value** | **Unit** | **Organism** | **Test method** | **Notes** |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >5000 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | |
| Acute toxicity, by inhalation: | LC50 | >5000 | mg/m3/8 h | Rat | OECD 403 (Acute Inhalation Toxicity) | |
| 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 |
| Symptoms: | | | | | | unconsciousness, headaches, dizziness, discoloration of the skin, vomiting, diarrhoea |
| Specific target organ toxicity - repeated exposure (STOT-RE), oral: | | | | | OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents) | Not to be expected |

| **Petroleum gases, liquified** | | | | | | |
|---|---|---|---|---|---|---|
| **Toxicity / effect** | **Endpoint** | **Value** | **Unit** | **Organism** | **Test method** | **Notes** |
| Acute toxicity, by inhalation: | LC50 | >5 | mg/l | | | |
| Skin corrosion/irritation: | | | | | | Not irritant |
| Serious eye damage/irritation: | | | | | | Not irritant |

| **2-(2-butoxyethoxy)ethanol** | | | | | | |
|---|---|---|---|---|---|---|
| **Toxicity / effect** | **Endpoint** | **Value** | **Unit** | **Organism** | **Test method** | **Notes** |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | 2764 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Negative |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Eye Irrit. 2 |
| Symptoms: | | | | | | breathing difficulties, respiratory distress, diarrhoea, coughing, mucous membrane irritation, dizziness, watering eyes, nausea |

| **Hydrocarbons, C6, isoalkanes, < 5% n-hexane** | | | | | | |
|---|---|---|---|---|---|---|
| **Toxicity / effect** | **Endpoint** | **Value** | **Unit** | **Organism** | **Test method** | **Notes** |
| Acute toxicity, by oral route: | LD50 | >16750 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >3350 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | |
| Acute toxicity, by inhalation: | LC50 | 259 | mg/l/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Vapours |
| Aspiration hazard: | | | | | | Yes |

| | | | | | | |
|---|---|---|---|---|---|---|
| Symptoms: | | | | | | drowsiness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting. |

## SECTION 12: Ecological information

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

**WD-40®BIKE® All Conditions Lube**

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| 12.1. Toxicity to fish: | | | | | | | n.d.a. |
| 12.1. Toxicity to daphnia: | | | | | | | n.d.a. |
| 12.1. Toxicity to algae: | | | | | | | n.d.a. |
| 12.2. Persistence and degradability: | | | | | | | n.d.a. |
| 12.3. Bioaccumulative potential: | | | | | | | n.d.a. |
| 12.4. Mobility in soil: | | | | | | | n.d.a. |
| 12.5. Results of PBT and vPvB assessment | | | | | | | n.d.a. |
| 12.6. Other adverse effects: | | | | | | | n.d.a. |

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

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| 12.1. Toxicity to fish: | LC50 | 96h | >1000 | mg/l | Oncorhynchus mykiss | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to fish: | NOELR | 28d | 0,13 | mg/l | Oncorhynchus mykiss | QSAR | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | >1000 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to daphnia: | NOELR | 21d | 0,23 | mg/l | Daphnia magna | QSAR | |
| 12.1. Toxicity to algae: | NOELR | 72h | 100 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.1. Toxicity to algae: | ErC50 | 72h | >1000 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.1. Toxicity to algae: | EbC50 | 72h | >1000 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.1. Toxicity to algae: | ErC50 | 72h | >1000 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.1. Toxicity to algae: | EbC50 | 72h | >1000 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.1. Toxicity to algae: | NOELR | 72h | 100 | mg/l | Raphidocelis subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12.2. Persistence and degradability: | | 28d | 80 | % | | OECD 301 F (Ready Biodegradability - Manometric Respirometry Test) | Readily biodegradable |
| 12.5. Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |

| **Petroleum gases, liquified** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Toxicity / effect** | **Endpoint** | **Time** | **Value** | **Unit** | **Organism** | **Test method** | **Notes** |
| 12.3. Bioaccumulative potential: | | | | | | | No |

| **2-(2-butoxyethoxy)ethanol** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Toxicity / effect** | **Endpoint** | **Time** | **Value** | **Unit** | **Organism** | **Test method** | **Notes** |
| 12.1. Toxicity to fish: | LC50 | 96h | 1300 | mg/l | Lepomis macrochirus | | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | >100 | mg/l | Daphnia magna | | |
| 12.2. Persistence and degradability: | | 28d | 76 | % | | OECD 301 D (Ready Biodegradability - Closed Bottle Test) | |
| 12.2. Persistence and degradability: | | 28d | 100 | % | activated sludge | OECD 302 B (Inherent Biodegradability - Zahn-Wellens/EMPA Test) | |
| Other information: | | | | | | | Does not contain any organically bound halogens which can contribute to the AOX value in waste water. |

| **Hydrocarbons, C6, isoalkanes, < 5% n-hexane** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Toxicity / effect** | **Endpoint** | **Time** | **Value** | **Unit** | **Organism** | **Test method** | **Notes** |
| 12.1. Toxicity to fish: | EC50 | 96h | 18,27 | mg/l | Oncorhynchus mykiss | | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | 31,9 | mg/l | Daphnia magna | | |
| 12.2. Persistence and degradability: | | 28d | 98 | % | | | Readily biodegradable (Analogous conclusion) |
| 12.3. Bioaccumulative potential: | Log Kow | | 2,9-4 | | | | |
| 12.3. Bioaccumulative potential: | BCF | | 242-253 | | | | |
| 12.5. Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |

## 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.
Take full aerosol cans to problem waste collection.
Take emptied aerosol cans to valuable material collection.

### For contaminated packing material

Pay attention to local and national official regulations.
15 01 04 metallic packaging
15 01 10 packaging containing residues of or contaminated by hazardous substances
Do not perforate, cut up or weld uncleaned container.

## 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 |
| LQ: | 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:
Regulation (EC) No 1907/2006, Annex XVII
2-(2-butoxyethoxy)ethanol
Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): ~ 71,3 %

### REGULATION (EC) No 648/2004

n.a.

Observe youth employment law (German regulation).

### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

## SECTION 16: Other information

F00263
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):

| Classification in accordance with regulation (EC) No. 1272/2008 (CLP) | Evaluation method used |
|---|---|
| STOT SE 3, H336 | Classification according to calculation procedure. |
| Aerosol 1, H222 | Classification according to calculation procedure. |
| Asp. Tox. 1, H304 | Classification according to calculation procedure. |
| Aerosol 1, H229 | Classification based on the form or physical state. |

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).
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H220 Extremely flammable gas.

STOT SE — Specific target organ toxicity - single exposure - narcotic effects
Aerosol — Aerosols
Asp. Tox. — Aspiration hazard
Flam. Liq. — Flammable liquid
Flam. Gas — Flammable gases (including chemically unstable gases)
Eye Irrit. — Eye irritation
Aquatic Chronic — Hazardous to the aquatic environment - chronic

## 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
etc. 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
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC Intermediate Bulk Container
IBC (Code) International Bulk Chemical (Code)
IC Inhibitory concentration
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
ODP Ozone Depletion Potential
OECD Organisation for Economic Co-operation and Development
org. organic
PAH polycyclic aromatic hydrocarbon

PBT persistent, bioaccumulative and toxic
PC Chemical product category
PE Polyethylene
PNEC Predicted No Effect Concentration
POCP Photochemical ozone creation potential
ppm parts per million
PROC Process category
PTFE Polytetrafluorethylene
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SADT Self-Accelerating Decomposition Temperature
SAR Structure Activity Relationship
SU Sector of use
SVHC Substances of Very High Concern
Tel. Telephone
ThOD Theoretical oxygen demand
TOC Total organic carbon
TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative
WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).
WHO World Health Organization
wwt wet weight

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:

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