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# 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

# Bremsfluessigkeit DOT 5.1 1 L

Art.: 21162

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

Hydraulic fluid

Sector of use [SU]: SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites SU21 - Consumer uses: Private households (=general public = consumers) SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Chemical product category [PC]: PC16 - Heat transfer fluids PC17 - Hydraulic fluids Process category [PROC]: 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 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) PROC20 - Use of functional fluids in small devices Article Categories [AC]: AC99 - Not required. Environmental Release Category [ERC]: ERC 4 - Use of non-reactive processing aid at industrial site (no inclusion into or onto article) ERC 7 - Use of functional fluid at industrial site ERC 9a - Widespread use of functional fluid (indoor) ERC 9b - Widespread use of functional fluid (outdoor) Uses advised against: No information available at present.

# 1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH, Jerg-Wieland-Str. 4, 89081 Ulm-Lehr, Germany Phone:(+49) 0731-1420-0, Fax:(+49) 0731-1420-88

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:

# Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture



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

The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

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

EUH210-Safety data sheet available on request.

### 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)

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**

Glycol ether Polyglycols Corrosion inhibitor Glycol ether borate

# 3.1 Substance

### n.a. **3.2 Mixture**

| 2-[2-(2-butoxyethoxy)ethoxy]ethanol                         |                  |
|---|------------------|
| Registration number (REACH)                                 |                  |
| Index   | 603-183-00-0     |
| EINECS, ELINCS, NLP   | 205-592-6        |
| CAS   | 143-22-6         |
| content %   | 1-<5             |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Eye Dam. 1, H318 |

| 2-(2-methoxyethoxy)ethanol                                  | Substance for which an EU exposure limit value applies. |
|---|---|
| Registration number (REACH)                                 |   |
| Index   | 603-107-00-6  |
| EINECS, ELINCS, NLP   | 203-906-6   |
| CAS   | 111-77-3  |
| content %   | 1-<3  |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Repr. 2, H361d  |

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 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.

# **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

### Inhalation

### Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

### 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.



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### 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. Do not induce vomiting - give copious water to drink. 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.

The following may occur: Irritation of the eyes Product removes fat. Dermatitis (skin inflammation) In aerosol misting: Irritation of the respiratory tract Ingestion of large quantities: Kidney damage Coma Death 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** Indications for the physician:

Symptomatic treatment. Antidote: None known

# **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media

Suitable extinguishing media

Water jet spray / alcohol resistant foam / CO2 / dry extinguisher.

### 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 pyrolysis products. **5.3 Advice for firefighters** 

### In case of fire and/or explosion do not breathe fumes.

In case of fire and/or explosion do not breathe tumes. Protective respirator with independent air supply. 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

Ensure sufficient supply of air. Avoid contact with eyes or skin. If applicable, caution - risk of slipping.

### 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. If accidental entry into drainage system occurs, inform responsible authorities.

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

Soak up with absorbent material (e.g. sand, earth) and dispose of according to Section 13.



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### Flush residue using copious water. 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.

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Avoid aerosol formation.

Avoid contact with eyes.

Avoid long lasting or intensive contact with skin. Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

### 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

Not to be stored in gangways or stair wells. Store product closed and only in original packing. Protect against moisture and store closed. 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

| Chemical Name                | 2-(2-methoxyethoxy)ethanol |                            | Content %:1-<3 |
|------------------------------|----------------------------|----------------------------|----------------|
| WEL-TWA: 10 ppm (50,1 mg/m3) | (WEL, EU) WEL-STEL:        |                            |                |
| Monitoring procedures:       |                            |                            |                |
| BMGV:                        |                            | Other information: Sk (WEL | ., EU)         |

| Area of application | Exposure route /         | Effect on health    | Descriptor | Value | Unit     | Note |
|---------------------|--------------------------|---------------------|------------|-------|----------|------|
|                     | Environmental            |                     |            |       |          |      |
|                     | compartment              |                     |            |       |          |      |
|                     | Environment - freshwater |                     | PNEC       | 1,5   | mg/l     |      |
|                     | Environment - marine     |                     | PNEC       | 0,15  | mg/l     |      |
|                     | Environment - sediment,  |                     | PNEC       | 0,13  | mg/kg dw |      |
|                     | marine                   |                     |            |       |          |      |
|                     | Environment - sediment,  |                     | PNEC       | 5,77  | mg/kg dw |      |
|                     | freshwater               |                     |            |       |          |      |
|                     | Environment - soil       |                     | PNEC       | 0,45  | mg/kg dw |      |
|                     | Environment - sewage     |                     | PNEC       | 200   | mg/l     |      |
|                     | treatment plant          |                     |            |       |          |      |
|                     | Environment - water,     |                     | PNEC       | 5     | mg/l     |      |
|                     | sporadic (intermittent)  |                     |            |       |          |      |
|                     | release                  |                     |            |       |          |      |
| Consumer            | Human - dermal           | Long term, systemic | DNEL       | 25    | mg/kg    |      |
|                     |                          | effects             |            |       | bw/day   |      |
| Consumer            | Human - inhalation       | Long term, systemic | DNEL       | 117   | mg/m3    |      |
|                     |                          | effects             |            |       |          |      |



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| Consumer            | Human - oral       | Long term, systemic effects    | DNEL | 2,5 | mg/kg<br>bw/day |  |
|---------------------|--------------------|--------------------------------|------|-----|-----------------|--|
| Workers / employees | Human - dermal     | Long term, systemic<br>effects | DNEL | 50  | mg/kg<br>bw/day |  |
| Workers / employees | Human - inhalation | Long term, systemic<br>effects | DNEL | 195 | mg/m3           |  |

| Area of application | Exposure route /         | Effect on health    | Descriptor | Value | Unit     | Note |
|---------------------|--------------------------|---------------------|------------|-------|----------|------|
|                     | Environmental            |                     |            |       |          |      |
|                     | compartment              |                     |            |       |          |      |
|                     | Environment - freshwater |                     | PNEC       | 12    | mg/l     |      |
|                     | Environment - marine     |                     | PNEC       | 1,2   | mg/l     |      |
|                     | Environment - water,     |                     | PNEC       | 12    | mg/l     |      |
|                     | sporadic (intermittent)  |                     |            |       |          |      |
|                     | release                  |                     |            |       |          |      |
|                     | Environment - sediment,  |                     | PNEC       | 44,4  | mg/kg dw |      |
|                     | freshwater               |                     |            |       |          |      |
|                     | Environment - sediment,  |                     | PNEC       | 0,44  | mg/l     |      |
|                     | marine                   |                     |            |       |          |      |
|                     | Environment - soil       |                     | PNEC       | 2,44  | mg/kg dw |      |
| Consumer            | Human - dermal           | Long term, systemic | DNEL       | 0,27  | mg/kg    |      |
|                     |                          | effects             |            |       | bw/day   |      |
| Consumer            | Human - inhalation       | Long term, systemic | DNEL       | 25    | mg/m3    |      |
|                     |                          | effects             |            |       |          |      |
| Consumer            | Human - oral             | Long term, systemic | DNEL       | 1,5   | mg/kg    |      |
|                     |                          | effects             |            |       | bw/day   |      |
| Workers / employees | Human - dermal           | Long term, systemic | DNEL       | 0,53  | mg/kg    |      |
|                     |                          | effects             |            |       | bw/day   |      |
| Workers / employees | Human - inhalation       | Long term, systemic | DNEL       | 50,1  | mg/m3    |      |
|                     |                          | effects             |            |       |          |      |

| Area of application | Exposure route /<br>Environmental<br>compartment           | Effect on health               | Descriptor | Value | Unit       | Note |
|---------------------|--|--------------------------------|------------|-------|------------|------|
|                     | Environment - freshwater                                   |                                | PNEC       | 10    | mg/l       |      |
|                     | Environment - marine                                       |                                | PNEC       | 1     | mg/l       |      |
|                     | Environment - water,<br>sporadic (intermittent)<br>release |                                | PNEC       | 50    | mg/l       |      |
|                     | Environment - sediment,<br>freshwater                      |                                | PNEC       | 36,6  | mg/kg dw   |      |
|                     | Environment - marine                                       |                                | PNEC       | 0,8   | mg/kg dw   |      |
|                     | Environment - soil   |                                | PNEC       | 1,73  | mg/kg dw   |      |
|                     | Environment - sewage<br>treatment plant                    |                                | PNEC       | 200   | mg/l       |      |
|                     | Environment - oral (animal feed)                           |                                | PNEC       | 89    | mg/kg feed |      |
| Consumer            | Human - dermal   | Long term, systemic effects    | DNEL       | 20    | mg/kg bw/d |      |
| Consumer            | Human - inhalation   | Long term, systemic effects    | DNEL       | 93    | mg/m3      |      |
| Consumer            | Human - oral   | Long term, systemic effects    | DNEL       | 2     | mg/kg bw/d |      |
| Workers / employees | Human - dermal   | Long term, systemic effects    | DNEL       | 40    | mg/kg bw/d |      |
| Workers / employees | Human - inhalation   | Long term, systemic<br>effects | DNEL       | 156   | mg/m3      |      |

(B) WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW =



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"Arbeitsplatzgrenzwert" (workplace limit value, Germany).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | 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.

# 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. BS EN 14042.

BS 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:

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Tight fitting protective goggles (EN 166) with side protection, with danger of splashes.

Skin protection - Hand protection: Recommended Safety gloves made of natural rubber latex (EN 374). Safety gloves made of PE laminate (EN 374). Protective PVC gloves (EN 374) Protective nitrile gloves (EN 374). Minimum layer thickness in mm:  $\geq = 0,4$ Permeation time (penetration time) in minutes:  $\geq = 480$ The breakthrough times determined in accordance with EN 16523-1 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 fumes build up, use suitable breathing mask. 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.



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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.

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### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

Physical state: Colour: Colour: Odour: Odour threshold: pH-value: Melting point/freezing point: Initial boiling point and boiling range: Flash point: Evaporation rate: Flammability (solid, gas): Lower explosive limit: Upper explosive limit: Vapour pressure: Vapour density (air = 1): Density: Bulk density: Solubility(ies): Water solubility: Partition coefficient (n-octanol/water):

Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties: Oxidising properties:

### 9.2 Other information

Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content:

Liquid Amber Colourless Mild Not determined 7-10,5 (SAE J 1703) Not determined >260 °C >100 °C (IP 35 (Pensky-Martens, open cup)) Not determined Not determined Not determined Not determined <2 mbar (20°C) Vapours heavier than air. 1,04-1,09 g/ml (20°C) Not determined Not determined Mixable <2 (OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)) >300 °C (ASTM D 286) Not determined ~5-10 cSt (20°C, ASTM D 445) Not determined Not determined

Not determined Not determined Not determined 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 decomposition if used as intended. 10.4 Conditions to avoid See also section 7. Strong heat Protect from humidity. Product is hygroscopic. 10.5 Incompatible materials See also section 7. Avoid contact with strong oxidizing agents. Carefully avoid contamination of the product with foreign substances.

### **10.6 Hazardous decomposition products**



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See also section 5.2 No decomposition when used as directed. Peroxides

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# **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

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

| Toxicity / effect  | Endpoint | Value  | Unit  | Organism | Test method  | Notes          |
|--|----------|--------|-------|----------|--|----------------|
| Acute toxicity, by oral route:                                   | LD50     | > 5000 | mg/kg | Rat      |  |                |
| Acute toxicity, by dermal route:                                 | LD50     | > 2000 | mg/kg | Rat      |  |                |
| Acute toxicity, by inhalation:                                   |          |        |       |          |  | n.d.a.         |
| Skin corrosion/irritation:                                       |          |        |       |          | OECD 404 (Acute<br>Dermal<br>Irritation/Corrosion) | Not irritant   |
| Serious eye damage/irritation:                                   |          |        |       |          | OECD 405 (Acute Eye<br>Irritation/Corrosion)       | Not irritant   |
| 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 -<br>single exposure (STOT-SE):   |          |        |       |          |  | n.d.a.         |
| Specific target organ toxicity -<br>repeated exposure (STOT-RE): |          |        |       |          |  | n.d.a.         |
| Aspiration hazard:   |          |        |       |          |  | n.d.a.         |
| Symptoms:  |          |        |       |          |  | n.d.a.         |
| Other information:   |          |        |       |          |  | Classification |
|  |          |        |       |          |  | according to   |
|  |          |        |       |          |  | calculation    |
|  |          |        |       |          |  | procedure.     |

| 2-[2-(2-butoxyethoxy)ethoxy]et   | 2-[2-(2-butoxyethoxy)ethoxy]ethanol |            |       |          |                        |                 |  |  |  |
|----------------------------------|-------------------------------------|------------|-------|----------|------------------------|-----------------|--|--|--|
| Toxicity / effect                | Endpoint                            | Value      | Unit  | Organism | Test method            | Notes           |  |  |  |
| Acute toxicity, by oral route:   | LD50                                | 5100-6616  | mg/kg | Rat      |                        |                 |  |  |  |
| Acute toxicity, by dermal route: | LD50                                | >2000-6540 | mg/kg | Rabbit   |                        |                 |  |  |  |
| Germ cell mutagenicity:          |                                     |            |       |          | OECD 471 (Bacterial    | Negative        |  |  |  |
|                                  |                                     |            |       |          | Reverse Mutation Test) |                 |  |  |  |
| Symptoms:                        |                                     |            |       |          |                        | cornea opacity, |  |  |  |
|                                  |                                     |            |       |          |                        | mucous          |  |  |  |
|                                  |                                     |            |       |          |                        | membrane        |  |  |  |
|                                  |                                     |            |       |          |                        | irritation      |  |  |  |

| 2-(2-methoxyethoxy)ethanol       |          |       |       |          |             |       |  |  |
|----------------------------------|----------|-------|-------|----------|-------------|-------|--|--|
| Toxicity / effect                | Endpoint | Value | Unit  | Organism | Test method | Notes |  |  |
| Acute toxicity, by oral route:   | LD50     | 9210  | mg/kg | Rat      |             |       |  |  |
| Acute toxicity, by dermal route: | LD50     | 6500  | mg/kg | Rabbit   |             |       |  |  |



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| Symptoms: |  | breathing         |
|-----------|--|-------------------|
|           |  | difficulties,     |
|           |  | respiratory       |
|           |  | distress,         |
|           |  | heart/circulatory |
|           |  | disorders,        |
|           |  | coughing,         |
|           |  | headaches,        |
|           |  | gastrointestinal  |
|           |  | disturbances,     |
|           |  | mucous            |
|           |  | membrane          |
|           |  | irritation,       |
|           |  | dizziness,        |
|           |  | nausea            |

# **SECTION 12: Ecological information**

| Bremsfluessigkeit DOT 5.1 1 L<br>Art.: 21162 |          |      |       |      |                        |             |                                |  |  |
|--|----------|------|-------|------|------------------------|-------------|--------------------------------|--|--|
| Toxicity / effect                            | Endpoint | Time | Value | Unit | Organism               | Test method | Notes                          |  |  |
| 12.1. Toxicity to fish:                      | LC50     | 96h  | > 100 | mg/l | Oncorhynchus<br>mykiss |             |                                |  |  |
| 12.1. Toxicity to daphnia:                   |          |      |       |      |                        |             | n.d.a.                         |  |  |
| 12.1. Toxicity to algae:                     |          |      |       |      |                        |             | n.d.a.                         |  |  |
| 12.2. Persistence and                        |          |      |       |      |                        |             | n.d.a.                         |  |  |
| degradability:                               |          |      |       |      |                        |             |                                |  |  |
| 12.3. Bioaccumulative                        |          |      |       |      |                        |             | Not accepted                   |  |  |
| potential:                                   |          |      |       |      |                        |             | owing to the                   |  |  |
|  |          |      |       |      |                        |             | logP values of the components. |  |  |
| 12.4. Mobility in soil:                      |          |      |       |      |                        |             | n.d.a.                         |  |  |
| 12.5. Results of PBT<br>and vPvB assessment  |          |      |       |      |                        |             | n.d.a.                         |  |  |
| 12.6. Other adverse effects:                 |          |      |       |      |                        |             | n.d.a.                         |  |  |

| 2-[2-(2-butoxyethoxy)ethoxy]ethanol  |          |      |               |      |                            |  |       |  |
|--------------------------------------|----------|------|---------------|------|----------------------------|--|-------|--|
| Toxicity / effect                    | Endpoint | Time | Value         | Unit | Organism                   | Test method  | Notes |  |
| 12.1. Toxicity to fish:              | LC50     | 96h  | 1305-<br>4600 | mg/l | Leuciscus idus             |  |       |  |
| 12.1. Toxicity to fish:              | LC50     | 96h  | 1350-<br>2400 | mg/l | Pimephales<br>promelas     |  |       |  |
| 12.1. Toxicity to daphnia:           | EC50     | 48h  | 500-<br>2802  | mg/l | Daphnia magna              |  |       |  |
| 12.1. Toxicity to algae:             | EC50     | 72h  | >500          | mg/l | Scenedesmus<br>subspicatus |  |       |  |
| 12.2. Persistence and degradability: |          | 14d  | 88            | %    |                            | OECD 301 E<br>(Ready<br>Biodegradability -<br>Modified OECD<br>Screening Test) |       |  |

| 2-(2-methoxyethoxy)ethanol |          |      |       |      |                |             |       |  |
|----------------------------|----------|------|-------|------|----------------|-------------|-------|--|
| Toxicity / effect          | Endpoint | Time | Value | Unit | Organism       | Test method | Notes |  |
| 12.1. Toxicity to fish:    | LC50     | 24h  | >5000 | mg/l | Leuciscus idus |             |       |  |
| 12.1. Toxicity to algae:   | EC50     | 72h  | >500  | mg/l | Scenedesmus    |             |       |  |
|                            |          |      |       |      | subspicatus    |             |       |  |

# **SECTION 13: Disposal considerations**



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# 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 01 13 brake fluids Recommendation: Sewage disposal shall be discouraged. Pay attention to local and national official regulations. E.g. dispose at suitable refuse site. E.g. suitable incineration plant. **For contaminated packing material** 

### Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

### **SECTION 14: Transport information**

| General statements<br>14.1. UN number:<br>Transport by road/by rail (ADR/RID)<br>14.2. UN proper shipping name: | n.a.           |
|---|----------------|
| 14.2. On proper shipping name.<br>14.3. Transport hazard class(es):   | n.a.           |
| 14.4. Packing group:  | n.a.           |
| Classification code:  | n.a.           |
| LQ:   | n.a.           |
| 14.5. Environmental hazards:  | Not applicable |
| Tunnel restriction code:  |                |
| Transport by sea (IMDG-code)  |                |
| 14.2. UN proper shipping name:  |                |
| 14.3. Transport hazard class(es):   | n.a.           |
| 14.4. Packing group:  | n.a.           |
| Marine Pollutant:   | n.a            |
| 14.5. Environmental hazards:  | Not applicable |
| Transport by air (IATA)   |                |
| 14.2. UN proper shipping name:  |                |
| 14.3. Transport hazard class(es):   | n.a.           |
| 14.4. Packing group:  | n.a.           |
| 14.5. Environmental hazards:  | Not applicable |
| 14.6. Special precautions for user  |                |
| Unless specified otherwise, general measures for safe transport must be   | e followed.    |

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

Non-dangerous material according to Transport Regulations.

### **SECTION 15: Regulatory information**

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

Observe restrictions:

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!

Regulation (EC) No 1907/2006, Annex XVII

2-(2-methoxyethoxy)ethanol

General hygiene measures for the handling of chemicals are applicable.



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Directive 2010/75/EU (VOC):

0 g/l

### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

# **SECTION 16: Other information**

Revised sections:

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

Not applicable

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). H361d Suspected of damaging the unborn child. H318 Causes serious eye damage.

Eye Dam. — Serious eye damage Repr. — Reproductive toxicity

### Any abbreviations and acronyms used in this document:

AC Article Categories according, according to acc., acc. to ACGIH American Conference of Governmental Industrial Hygienists Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the ADR International Carriage of Dangerous Goods by Road) AOEL Acceptable Operator Exposure Level AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP) ATE 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** Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation) BGV Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol) BHT BMGV Biological monitoring guidance value (EH40, UK) BOD Biochemical oxygen demand BSEF Bromine Science and Environmental Forum bw body weight CAS **Chemical Abstracts Service** Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids CEC CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques CIPAC Collaborative International Pesticides Analytical Council Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances CLP 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 drv weight for example (abbreviation of Latin 'exempli gratia'), for instance e.g. EC European Community ECHA European Chemicals Agency



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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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