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## Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)

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

**1.1 Product identifier** 

## Kuehlerreiniger Radiator Cleaner

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

Cleaner Uses advised against: No information available at present.

1.3 Details of the supplier of the safety data sheet

UQUI MOLY GmbH
Jerg-Wieland-Str. 4
89081 Ulm-Lehr
Tel.: (+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:

Landspitali- The National University Hospital of Iceland, tel. +354 543 2222 or 112 (valid only for Iceland) **Telephone number of the company in case of emergencies:** +49 (0) 700 / 24 112 112 (LMR)

+1 872 5888271 (LMR)

## **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixtureClassification according to Regulation (EC) 1272/2008 (CLP)Hazard classHazard categoryHazard statementEye Dam.1H318-Causes serious eye damage.

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



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Danger

H318-Causes serious eye damage.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

P280-Wear eye protection / face protection. P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310-Immediately call a POISON CENTER / doctor.

EUH208-Contains Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Sulfonic acids, C14-17-sec-alkane, sodium salts Fatty alcohol ethoxylate

### 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 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

## **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

#### n.a. 3.2 Mixtures

| Fatty alcohol ethoxylate   |                         |
|--|-------------------------|
| Registration number (REACH)  |                         |
| Index  |                         |
| EINECS, ELINCS, NLP, REACH-IT List-No.                                 |                         |
| CAS  | 78330-21-9              |
| content %  | 5-<10                   |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Acute Tox. 4, H302      |
|  | Eye Dam. 1, H318        |
|  | Aquatic Chronic 3, H412 |
| Specific Concentration Limits and ATE                                  | ATE (oral): 500 mg/kg   |
|  |                         |
| Sulfonic acids, C14-17-sec-alkane, sodium salts                        |                         |
| Registration number (REACH)  | 01-2119489924-20-XXXX   |
| Index  |                         |
| EINECS, ELINCS, NLP, REACH-IT List-No.                                 | 307-055-2               |
| CAS  | 97489-15-1              |
| content %  | 1-<5                    |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Acute Tox. 4, H302      |
|  | Skin Irrit. 2, H315     |
|  | Eye Dam. 1, H318        |
|  | Aguatic Chronic 3, H412 |



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|   |   |
| Specific Concentration Limits and ATE   | Skin Irrit. 2, H315: >=10,001 %                               |
|   | Eye Dam. 1, H318: >=15,001 %                                  |
|   | Eye Irrit. 2, H319: >=10,001 %                                |
|   | ATE (oral): 500 mg/kg   |
|   |   |
| Morpholine  | Substance for which an EU exposure limit value applies.       |
| Registration number (REACH)   | 01-2119496057-30-XXXX   |
| Index   | 613-028-00-9  |
| EINECS, ELINCS, NLP, REACH-IT List-No.  | 203-815-1   |
| CAS   | 110-91-8  |
|   |   |
| content %   | 0,1-<0,25   |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors        | Flam. Liq. 3, H226  |
|   | Acute Tox. 3, H311  |
|   | Acute Tox. 3, H331  |
|   | Acute Tox. 4, H302  |
|   | Skin Corr. 1A, H314   |
|   | Eye Dam. 1, H318  |
|   | Repr. 2, H361fd   |
| Specific Concentration Limits and ATE   | ATE (oral): 1960 mg/kg  |
| Specific Concentration Limits and ATE   |   |
|   | ATE (dermal): 500 mg/kg                                       |
|   | ATE (as inhalation, Dusts or mist): 0,5 mg/l/4h               |
|   | ATE (as inhalation, Vapours): 8 mg/l/4h                       |
|   |   |
| Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-          |   |
| 2H-isothiazol-3-one (3:1)   |   |
| Registration number (REACH)   |   |
| Index   | 613-167-00-5  |
| EINECS, ELINCS, NLP, REACH-IT List-No.  |   |
| CAS   | 55965-84-9  |
| content %   | 0.00015-<0.0015   |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors        | EUH071  |
| Classification according to Regulation (EC) 12/2/2006 (CLP), M-factors        |   |
|   | Acute Tox. 2, H310  |
|   | Acute Tox. 2, H330  |
|   | Acute Tox. 3, H301  |
|   | Skin Corr. 1C, H314   |
|   | Eye Dam. 1, H318  |
|   | Skin Sens. 1A, H317   |
|   | Aquatic Acute 1, H400 (M=100)                                 |
|   | Aquatic Chronic 1, H410 (M=100)                               |
| Specific Concentration Limits and ATE   | Skin Corr. 1C, H314: >=0,6 %                                  |
| opeone concentration chints and ATE   | Skin Con. 10, 11314. 2=0,0 %<br>Skin Irrit. 2, H315: >=0,06 % |
|   |   |
|   | Eye Dam. 1, H318: >=0,6 %                                     |
|   | Eye Irrit. 2, H319: >=0,06 %                                  |
|   | Skin Sens. 1A, H317: >=0,0015 %                               |
|   | ATE (oral): 64 mg/kg  |
|   | ATE (dermal): 87,12 mg/kg                                     |
|   | ATE (as inhalation, Dusts or mist): 0,17 mg/l/4h              |
|   | ATE (as inhalation, Vapours): 0,81 mg/l/4h                    |
|   |   |

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.

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.

The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

## **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!



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### Inhalation

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.

### Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.

Protect uninjured eye. Follow-up examination by an ophthalmologist.

### 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. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. eyes, reddened watering eves irritation of the eyes Allergic reaction possible.

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

Symptomatic treatment.

### **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media

Adapt to the nature and extent of fire. Water jet spray/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 Oxides of sulphur Oxides of nitrogen Toxic gases

### 5.3 Advice for firefighters

For personal protective equipment see Section 8. 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.

Dispose of contaminated extinction water according to official regulations.

### SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

### 6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination. Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

### 6.1.2 For emergency responders



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See section 8 for suitable protective equipment and material specifications. 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. 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 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. Store in a well ventilated place.

### 7.3 Specific end use(s)

#### No information available at present.

Observe the instructions for good working practice and the recommendations for risk assessment. Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries, depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

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

### 8.1 Control parameters

| WEL-TWA: 10 ppm (36 mg/m3) (WEL-TWA, EU)   WEL-STEL: 20 ppm (72 mg/m3) (WEL-STEL, EU)      Monitoring procedures:    Other information: Sk | Chemical Name                  | Morpholine            |                                  |   |
|--|--------------------------------|-----------------------|----------------------------------|---|
|  | WEL-TWA: 10 ppm (36 mg/m3) (WE | EL-TWA, EU) WEL-STEL: | 20 ppm (72 mg/m3) (WEL-STEL, EU) |   |
| BMGV:  | Monitoring procedures:         |                       |                                  |   |
| Billov.  | BMGV:                          |                       | Other information: S             | k |

| Sulfonic acids, C14-17-sec-alkane, sodium salts |  |                  |            |       |      |      |  |
|---|--|------------------|------------|-------|------|------|--|
| Area of application                             | Exposure route /   | Effect on health | Descriptor | Value | Unit | Note |  |
|   | Environmental  |                  |            |       |      |      |  |
|   | compartment  |                  |            |       |      |      |  |
|   | Environment - freshwater                                   |                  | PNEC       | 0,04  | mg/l |      |  |
|   | Environment - marine                                       |                  | PNEC       | 0,004 | mg/l |      |  |
|   | Environment - water,<br>sporadic (intermittent)<br>release |                  | PNEC       | 0,06  | mg/l |      |  |
|   |  | ·                |            |       |      |      |  |



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|                     | Environment - sediment,<br>freshwater   |                             | PNEC | 9,4  | mg/kg dw   |
|---------------------|---|-----------------------------|------|------|------------|
|                     | Environment - sediment,<br>marine       |                             | PNEC | 0,94 | mg/kg dw   |
|                     | Environment - soil                      |                             | PNEC | 9,4  | mg/kg dw   |
|                     | Environment - sewage<br>treatment plant |                             | PNEC | 600  | mg/l       |
|                     | Environment - oral (animal feed)        |                             | PNEC | 53,3 | mg/kg feed |
|                     | Environment - periodic<br>release       |                             | DNEL | 0    | mg/kg      |
| Consumer            | Human - dermal                          | Long term, systemic effects | DNEL | 3,57 | mg/kg bw/d |
| Consumer            | Human - inhalation                      | Long term, systemic effects | DNEL | 12,4 | mg/m3      |
| Consumer            | Human - oral                            | Long term, systemic effects | DNEL | 7,1  | mg/kg bw/d |
| Consumer            | Human - dermal                          | Short term, local effects   | DNEL | 2,8  | mg/cm2     |
| Consumer            | Human - dermal                          | Long term, local effects    | DNEL | 2,8  | mg/cm2     |
| Workers / employees | Human - dermal                          | Short term, local effects   | DNEL | 2,8  | mg/cm2     |
| Workers / employees | Human - dermal                          | Long term, systemic effects | DNEL | 5    | mg/kg bw/d |
| Workers / employees | Human - inhalation                      | Long term, systemic effects | DNEL | 35   | mg/m3      |
| Workers / employees | Human - dermal                          | Long term, local effects    | DNEL | 2,8  | mg/cm2     |

| Morpholine          |  |                                |            |        |            |      |
|---------------------|--|--------------------------------|------------|--------|------------|------|
| Area of application | Exposure route /<br>Environmental<br>compartment | Effect on health               | Descriptor | Value  | Unit       | Note |
|                     | Environment - freshwater                         |                                | PNEC       | 0,163  | mg/l       |      |
|                     | Environment - marine                             |                                | PNEC       | 0,0163 | mg/l       |      |
|                     | Environment - sediment,<br>freshwater            |                                | PNEC       | 1,83   | mg/kg dw   |      |
|                     | Environment - sediment,<br>marine                |                                | PNEC       | 0,183  | mg/kg dw   |      |
|                     | Environment - sporadic<br>(intermittent) release |                                | PNEC       | 0,45   | mg/l       |      |
|                     | Environment - sewage<br>treatment plant          |                                | PNEC       | 10     | mg/l       |      |
|                     | Environment - soil                               |                                | PNEC       | 0,269  | mg/kg      |      |
| Workers / employees | Human - dermal                                   | Long term, systemic<br>effects | DNEL       | 0,84   | mg/kg bw/d |      |
| Workers / employees | Human - inhalation                               | Long term, local effects       | DNEL       | 36     | mg/m3      |      |

| Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) |  |                  |            |       |       |      |  |
|---|--|------------------|------------|-------|-------|------|--|
| Area of application   | Exposure route /<br>Environmental                | Effect on health | Descriptor | Value | Unit  | Note |  |
|   | compartment                                      |                  |            |       |       |      |  |
|   | Environment - freshwater                         |                  | PNEC       | 3,39  | µg/l  |      |  |
|   | Environment - marine                             |                  | PNEC       | 3,39  | µg/l  |      |  |
|   | Environment - sporadic<br>(intermittent) release |                  | PNEC       | 3,39  | µg/l  |      |  |
|   | Environment - sewage<br>treatment plant          |                  | PNEC       | 0,23  | mg/kg |      |  |
|   | Environment - sediment,<br>freshwater            |                  | PNEC       | 0,027 | mg/kg |      |  |
|   | Environment - sediment,<br>marine                |                  | PNEC       | 0,027 | mg/kg |      |  |



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|                     | Environment - soil |                                 | PNEC | 0,01 | mg/kg           |  |
|---------------------|--------------------|---------------------------------|------|------|-----------------|--|
| Consumer            | Human - inhalation | Long term, local effects        | DNEL | 0,02 | mg/m3           |  |
| Consumer            | Human - inhalation | Short term, local effects       | DNEL | 0,04 | mg/m3           |  |
| Consumer            | Human - oral       | Long term, systemic<br>effects  | DNEL | 0,09 | mg/kg<br>bw/day |  |
| Consumer            | Human - oral       | Short term, systemic<br>effects | DNEL | 0,11 | mg/kg<br>bw/day |  |
| Workers / employees | Human - inhalation | Long term, local effects        | DNEL | 0,02 | mg/m3           |  |
| Workers / employees | Human - inhalation | Short term, local effects       | DNEL | 0,04 | mg/m3           |  |

Inited Kingdom | WEL-TWA = Workplace Exposure Limit - Long-term exposure limit - 8-hour TWA (= time weighted average) reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:

(8) = Inhalable fraction (2004/37/CE, 2017/164/EU). (9) = Respirable fraction (2004/37/CE, 2017/164/EU). (11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). (8) = INHALABLE EXPOSURE LIMIT - Short-term exposure limit - 15-minute reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:

(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |

| BMGV = Biological monitoring guidance value (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL))

| Other information (EH40/2005 Workplace exposure limits (Fourth Edition 2020)): Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU or 2024/869/EU: (13) = The substance can cause sensitisation of the skin and of the respiratory tract (98/24/EC, 2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE), (15) = Substantial contribution to the total body burden via dermal exposure possible. |

## 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: Rubber gloves (EN ISO 374). Protective nitrile gloves (EN ISO 374). Minimum layer thickness in mm: 0,4 Permeation time (penetration time) in minutes: > 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.



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

Respiratory protection: Normally not necessary.

Thermal hazards: Not applicable

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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:   | Liquid   |
|---|--|
| Colour:   | Colourless, Turbid                                   |
| Odour:  | Characteristic                                       |
| Melting point/freezing point:                             | There is no information available on this parameter. |
| Boiling point or initial boiling point and boiling range: | There is no information available on this parameter. |
| Flammability:   | There is no information available on this parameter. |
| Lower explosion limit:                                    | There is no information available on this parameter. |
| Upper explosion limit:                                    | There is no information available on this parameter. |
| Flash point:  | >100 °C  |
| Auto-ignition temperature:                                | There is no information available on this parameter. |
| Decomposition temperature:                                | There is no information available on this parameter. |
| pH:   | 10,31  |
| Kinematic viscosity:                                      | >7 mm2/s (40°C)                                      |
| Solubility:   | Soluble  |
| Partition coefficient n-octanol/water (log value):        | Does not apply to mixtures.                          |
| Vapour pressure:  | There is no information available on this parameter. |
| Density and/or relative density:                          | 1,0144 g/ml (20°C)                                   |
| Relative vapour density:                                  | There is no information available on this parameter. |
| Particle characteristics:                                 | Does not apply to liquids.                           |
| 9.2 Other information                                     |  |

### 9.2 Other information

No information available at present.

## 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. None known **10.5 Incompatible materials** See also section 7.



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### Avoid contact with strong oxidizing agents. **10.6 Hazardous decomposition products** See also section 5.2

No decomposition when used as directed.

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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:   | ATE      | >2000 | mg/kg   |          |             | calculated value             |
| Acute toxicity, by dermal route: | ATE      | >2000 | mg/kg   |          |             | calculated value             |
| Acute toxicity, by inhalation:   | ATE      | >20   | mg/l/4h |          |             | calculated value,<br>Vapours |
| Acute toxicity, by inhalation:   | ATE      | >5    | mg/l/4h |          |             | calculated value,<br>Aerosol |
| Skin corrosion/irritation:       |          |       |         |          |             | n.d.a.                       |
| Serious eye damage/irritation:   |          |       |         |          |             | n.d.a.                       |
| Respiratory or skin              |          |       |         |          |             | n.d.a.                       |
| sensitisation:                   |          |       |         |          |             |                              |
| Germ cell mutagenicity:          |          |       |         |          |             | n.d.a.                       |
| Carcinogenicity:                 |          |       |         |          |             | n.d.a.                       |
| Reproductive toxicity:           |          |       |         |          |             | n.d.a.                       |
| Specific target organ toxicity - |          |       |         |          |             | n.d.a.                       |
| single exposure (STOT-SE):       |          |       |         |          |             |                              |
| Specific target organ toxicity - |          |       |         |          |             | n.d.a.                       |
| repeated exposure (STOT-RE):     |          |       |         |          |             |                              |
| Aspiration hazard:               |          |       |         |          |             | n.d.a.                       |
| Symptoms:                        |          |       |         |          |             | n.d.a.                       |

| Fatty alcohol ethoxylate         |          |       |       |          |             |       |  |
|----------------------------------|----------|-------|-------|----------|-------------|-------|--|
| Toxicity / effect                | Endpoint | Value | Unit  | Organism | Test method | Notes |  |
| Acute toxicity, by oral route:   | ATE      | 500   | mg/kg |          |             |       |  |
| Acute toxicity, by dermal route: | LD50     | >2000 | mg/kg | Rat      |             |       |  |

| Toxicity / effect                | Endpoint | Value     | Unit  | Organism    | Test method            | Notes                   |
|----------------------------------|----------|-----------|-------|-------------|------------------------|-------------------------|
| Acute toxicity, by oral route:   | LD50     | >500-2000 | mg/kg | Rat         | OECD 401 (Acute Oral   |                         |
|                                  |          |           |       |             | Toxicity)              |                         |
| Acute toxicity, by oral route:   | ATE      | 500       | mg/kg |             |                        |                         |
| Acute toxicity, by dermal route: | LD50     | >2000     | mg/kg | Mouse       |                        | Analogous<br>conclusion |
| Skin corrosion/irritation:       |          |           |       | Rabbit      | OECD 404 (Acute        | Skin Irrit. 2           |
|                                  |          |           |       |             | Dermal                 |                         |
|                                  |          |           |       |             | Irritation/Corrosion)  |                         |
| Serious eye damage/irritation:   |          | >15       | %     | Rabbit      | OECD 405 (Acute Eye    | Eye Dam. 1              |
|                                  |          |           |       |             | Irritation/Corrosion)  |                         |
| Serious eye damage/irritation:   |          | >10       | %     |             |                        | Eye Irrit. 2            |
| Respiratory or skin              |          |           |       | Guinea pig  | OECD 406 (Skin         | No (skin contact)       |
| sensitisation:                   |          |           |       |             | Sensitisation)         |                         |
| Germ cell mutagenicity:          |          |           |       | Salmonella  | OECD 471 (Bacterial    | Negative                |
|                                  |          |           |       | typhimurium | Reverse Mutation Test) |                         |
| Carcinogenicity:                 |          |           |       | Rat         |                        | Negative 2 years        |
| Reproductive toxicity:           |          | 200       | mg/kg | Rat         |                        | No indications of       |
|                                  |          |           |       |             |                        | such an effect.         |

| morphonine                     |          |       |       |          |             |       |
|--------------------------------|----------|-------|-------|----------|-------------|-------|
| Toxicity / effect              | Endpoint | Value | Unit  | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50     | 1910  | mg/kg | Rat      |             |       |
| Acute toxicity, by oral route: | ATE      | 1960  | mg/kg |          |             |       |
|                                |          |       |       |          |             |       |



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|                                  | 1    |     |         |             |                       | -                 |
|----------------------------------|------|-----|---------|-------------|-----------------------|-------------------|
| Acute toxicity, by dermal route: | ATE  | 500 | mg/kg   |             |                       |                   |
| Acute toxicity, by dermal route: | LD50 | 500 | mg/kg   | Rabbit      | OECD 402 (Acute       | References        |
|                                  |      |     | 0.0     |             | Dermal Toxicity)      |                   |
| Acute toxicity, by inhalation:   | LC50 | 8   | mg/l/4h | Rat         |                       | Vapours           |
| Acute toxicity, by inhalation:   | ATE  | 8   | mg/l/4h |             |                       | Vapours           |
| Acute toxicity, by inhalation:   | ATE  | 0,5 | mg/l/4h |             |                       | Dusts or mist     |
| Skin corrosion/irritation:       |      |     |         | Rabbit      | OECD 404 (Acute       | Corrosive, Skin   |
|                                  |      |     |         |             | Dermal                | Corr. 1A          |
|                                  |      |     |         |             | Irritation/Corrosion) |                   |
| Serious eye damage/irritation:   |      |     |         | Rabbit      | OECD 405 (Acute Eye   | Corrosive, Eye    |
| , , ,                            |      |     |         |             | Irritation/Corrosion) | Dam. 1            |
| Respiratory or skin              |      |     |         | Guinea pig  | OECD 406 (Skin        | No (skin contact) |
| sensitisation:                   |      |     |         |             | Sensitisation)        |                   |
| Germ cell mutagenicity:          |      |     |         | Salmonella  |                       | Negative          |
|                                  |      |     |         | typhimurium |                       |                   |

| Toxicity / effect                | Endpoint | Value      | Unit    | Organism   | Test method                             | Notes                    |
|----------------------------------|----------|------------|---------|------------|---|--------------------------|
| Acute toxicity, by oral route:   | LD50     | 64-66      | mg/kg   | Rat        | OECD 401 (Acute Oral<br>Toxicity)       | Acute Tox. 3             |
| Acute toxicity, by oral route:   | ATE      | 64         | mg/kg   |            |   |                          |
| Acute toxicity, by dermal route: | ATE      | 87,12      | mg/kg   |            |   |                          |
| Acute toxicity, by dermal route: | LD50     | >141       | mg/kg   | Rat        | OECD 402 (Acute<br>Dermal Toxicity)     | Acute Tox. 2             |
| Acute toxicity, by dermal route: | LD50     | 87,12-92,4 | mg/kg   | Rabbit     |   | Acute Tox. 2             |
| Acute toxicity, by inhalation:   | LC50     | 0,17-0,33  | mg/l/4h | Rat        | OECD 403 (Acute<br>Inhalation Toxicity) | Aerosol, Acute<br>Tox. 2 |
| Acute toxicity, by inhalation:   | LC50     | 0,81       | mg/l/4h | Rat        | OECD 403 (Acute<br>Inhalation Toxicity) | Vapours, Acute<br>Tox. 2 |
| Acute toxicity, by inhalation:   | ATE      | 0,81       | mg/l/4h |            |   | Vapours                  |
| Acute toxicity, by inhalation:   | ATE      | 0,17       | mg/l/4h |            |   | Dusts or mist            |
| Skin corrosion/irritation:       |          |            |         | Rabbit     |   | Skin Corr. 1C            |
| Serious eye damage/irritation:   |          |            |         | Rabbit     |   | Eye Dam. 1               |
| Respiratory or skin              |          |            |         | Guinea pig | OECD 406 (Skin                          | Yes (skin                |
| sensitisation:                   |          |            |         |            | Sensitisation)                          | contact), Skin           |
|                                  |          |            |         |            |   | Sens. 1A                 |
| Germ cell mutagenicity:          |          |            |         |            | in vitro                                | Negative                 |
| Germ cell mutagenicity:          |          |            |         | Mammalian  | in vitro                                | Negative                 |
| Symptoms:                        |          |            |         |            |   | diarrhoea,               |
|                                  |          |            |         |            |   | mucous                   |
|                                  |          |            |         |            |   | membrane                 |
|                                  |          |            |         |            |   | irritation,              |
|                                  |          |            |         |            |   | watering eyes            |

## 11.2. Information on other hazards

| Kuehlerreiniger<br>Radiator Cleaner |          |       |      |          |             |                 |
|-------------------------------------|----------|-------|------|----------|-------------|-----------------|
| Toxicity / effect                   | Endpoint | Value | Unit | Organism | Test method | Notes           |
| Endocrine disrupting properties:    |          |       |      |          |             | Does not apply  |
|                                     |          |       |      |          |             | to mixtures.    |
| Other information:                  |          |       |      |          |             | No other        |
|                                     |          |       |      |          |             | relevant        |
|                                     |          |       |      |          |             | information     |
|                                     |          |       |      |          |             | available on    |
|                                     |          |       |      |          |             | adverse effects |
|                                     |          |       |      |          |             | on health.      |

## **SECTION 12: Ecological information**

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



| - (78)                     |                  |             |             |                |                     |                     |                    |
|----------------------------|------------------|-------------|-------------|----------------|---------------------|---------------------|--------------------|
| -                          |                  |             |             |                |                     |                     |                    |
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|                            |                  |             |             |                |                     |                     |                    |
| Replacing version dated /  | version: 07.10.2 | 024 / 0031  |             |                |                     |                     |                    |
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| PDF print date: 05.03.202  | 5                |             |             |                |                     |                     |                    |
| Kuehlerreiniger            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     |                    |
| Radiator Cleaner           |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     |                    |
| Kuehlerreiniger            |                  |             |             |                |                     |                     |                    |
| Radiator Cleaner           |                  |             |             |                |                     |                     |                    |
|                            | <b>F</b> 1 1 4   |             |             | 11.14          |                     | <b>T</b> ( )        |                    |
| 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      |                  |             |             |                |                     |                     | The surfactant(s)  |
|                            |                  |             |             |                |                     |                     |                    |
| degradability:             |                  |             |             |                |                     |                     | contained in this  |
|                            |                  |             |             |                |                     |                     | mixture            |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | complies(comply)   |
|                            |                  |             |             |                |                     |                     | with the           |
|                            |                  |             |             |                |                     |                     | biodegradability   |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | criteria as laid   |
|                            |                  |             |             |                |                     |                     | down in            |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | Regulation (EC)    |
|                            |                  |             |             |                |                     |                     | No.648/2004 on     |
|                            |                  |             |             |                |                     |                     | detergents. Data   |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | to support this    |
|                            |                  |             |             |                |                     |                     | assertion are      |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | held at the        |
|                            |                  |             |             |                |                     |                     | disposal of the    |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | competent          |
|                            |                  |             |             |                |                     |                     | authorities of the |
|                            |                  |             |             |                |                     |                     | Member States      |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | and will be made   |
|                            |                  |             |             |                |                     |                     | available to       |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | them, at their     |
|                            |                  |             |             |                |                     |                     | direct request or  |
|                            |                  |             |             |                |                     |                     | at the request of  |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | a detergent        |
|                            |                  |             |             |                |                     |                     | manufacturer.      |
|                            |                  |             |             |                |                     |                     |                    |
| 12.3. Bioaccumulative      |                  |             |             |                |                     |                     | n.d.a.             |
| potential:                 |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | l                  |
| 12.4. Mobility in soil:    |                  |             |             |                |                     |                     | n.d.a.             |
| 12.5. Results of PBT       |                  |             |             |                |                     |                     | n.d.a.             |
|                            |                  |             |             |                |                     |                     | ····aiai           |
| and vPvB assessment        |                  |             |             |                |                     |                     |                    |
| 12.6. Endocrine            |                  |             |             |                |                     |                     | Does not apply     |
| disrupting properties:     |                  |             |             |                |                     |                     | to mixtures.       |
|                            |                  |             | +           |                |                     |                     |                    |
| 12.7. Other adverse        |                  |             |             |                |                     |                     | No information     |
| effects:                   |                  |             |             |                |                     |                     | available on       |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | other adverse      |
|                            |                  |             |             |                |                     |                     | effects on the     |
|                            |                  |             |             |                |                     |                     | environment.       |
|                            |                  |             |             |                |                     |                     |                    |
| Other information:         |                  |             |             |                |                     |                     | DOC-elimination    |
|                            |                  |             |             |                |                     |                     | degree(complexi    |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | ng organic         |
|                            |                  |             |             |                |                     |                     | substance)>=       |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             | +           |                |                     |                     | 80%/28d: No        |
| Other information:         | AOX              |             | 0           | %              |                     |                     | According to the   |
|                            |                  |             |             |                |                     |                     | recipe, contains   |
|                            |                  |             |             |                |                     |                     |                    |
|                            |                  |             |             |                |                     |                     | no AOX.            |
|                            |                  |             |             |                |                     |                     |                    |
| Fatty alcohol ethoxylate   |                  |             |             |                |                     |                     |                    |
|                            |                  |             | 1           | 1              |                     |                     |                    |
| Toxicity / effect          | Endpoint         | Time        | Value       | Unit           | Organism            | Test method         | Notes              |
| 12.1. Toxicity to fish:    | LC50             | İ           | 1-10        | mg/l           |                     |                     |                    |
|                            |                  |             |             |                |                     |                     |                    |
| 12.1. Toxicity to daphnia: | EC50             |             | 7,07        | mg/l           |                     |                     | 1                  |
| 12.1. Toxicity to algae:   | EC50             |             | 10          | mg/l           |                     |                     |                    |
|                            |                  | 00-1        |             |                |                     |                     |                    |
| 12.2. Persistence and      |                  | 28d         | >60         | %              |                     | OECD 301 D          |                    |
| degradability:             |                  |             |             |                |                     | (Ready              | 1                  |
|                            |                  |             |             |                |                     | Biodegradability -  | 1                  |
|                            |                  |             |             |                |                     | Biouegrauability -  |                    |
|                            |                  |             | 1           |                |                     | Closed Bottle Test) |                    |



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| Toxicity / effect                           | Endpoint  | Time | Value | Unit  | Organism                   | Test method   | Notes  |
|---|-----------|------|-------|-------|----------------------------|---|--|
| 12.1. Toxicity to fish:                     | NOÉC/NOEL | 28d  | 0,85  | mg/l  | Oncorhynchus<br>mykiss     | OECD 204 (Fish,<br>Prolonged Toxicity<br>Test - 14-Day<br>Study)                      |  |
| 12.1. Toxicity to fish:                     | LC50      | 96h  | 8,4   | mg/l  | Leuciscus idus             | 84/449/EEC C.1  |  |
| 12.1. Toxicity to daphnia:                  | NOEC/NOEL | 22d  | 0,36  | mg/l  | Daphnia magna              | OECD 202<br>(Daphnia sp.<br>Acute<br>Immobilisation<br>Test)                          |  |
| 12.1. Toxicity to daphnia:                  | EC50      | 48h  | 9,81  | mg/l  | Daphnia magna              | OECD 202<br>(Daphnia sp.<br>Acute<br>Immobilisation<br>Test)                          |  |
| 12.1. Toxicity to algae:                    | EC50      | 72h  | >61   | mg/l  | Scenedesmus<br>subspicatus | OECD 201 (Alga,<br>Growth Inhibition<br>Test)   |  |
| 12.2. Persistence and degradability:        |           | 34d  | 96,2  | %     | activated sludge           | OECD 304 A<br>(Inherent<br>Biodegradability in<br>Soil)                               | Readily<br>biodegradable   |
| 12.2. Persistence and degradability:        |           | 28d  | 78    | %     | activated sludge           | OECD 301 B<br>(Ready<br>Biodegradability -<br>Co2 Evolution<br>Test)                  | Readily<br>biodegradable   |
| 12.2. Persistence and degradability:        |           | 28d  | 89    | %     | activated sludge           | OECD 301 E<br>(Ready<br>Biodegradability -<br>Modified OECD<br>Screening Test)        | Readily<br>biodegradable   |
| 12.3. Bioaccumulative<br>potential:         | Log Pow   |      | 0,2   |       |                            | Regulation (EC)<br>440/2008 A.8<br>(PARTITION<br>COEFFICIENT)                         | Bioaccumulatior<br>is unlikely<br>(LogPow < 1).<br>20 °C, pH 7-8,5 |
| 12.5. Results of PBT<br>and vPvB assessment |           |      |       |       |                            |   | No PBT<br>substance, No<br>vPvB substance                          |
| Toxicity to bacteria:                       | NOEC/NOEL | 16h  | 600   | mg/l  | Pseudomonas<br>putida      | DIN 38412 T.8   |  |
| Other organisms:                            | NOEC/NOEL | 56d  | 470   | mg/kg | Eisenia foetida            | OECD 222<br>(Earthworm<br>Reproduction Test<br>(Eisenia<br>fetida/Eisenia<br>andrei)) |  |

| Toxicity / effect          | Endpoint | Time | Value | Unit | Organism        | Test method  | Notes      |
|----------------------------|----------|------|-------|------|-----------------|--|------------|
| 12.1. Toxicity to fish:    | LC50     | 96h  | >100  | mg/l | Oryzias latipes | OECD 203 (Fish,<br>Acute Toxicity<br>Test)                   |            |
| 12.1. Toxicity to daphnia: | EC50     | 48h  | 45    | mg/l | Daphnia magna   | OECD 202<br>(Daphnia sp.<br>Acute<br>Immobilisation<br>Test) | References |
| 12.1. Toxicity to daphnia: | EC10     | 21d  | 8,134 | mg/l | Daphnia magna   | OECD 211<br>(Daphnia magna<br>Reproduction Test)             |            |



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| 12.1. Toxicity to algae:                    | EC50 | 72h   | 64,6  | mg/l | Pseudokirchneriell<br>a subcapitata | OECD 201 (Alga,<br>Growth Inhibition<br>Test)  |   |
|---|------|-------|-------|------|-------------------------------------|--|---|
| 12.2. Persistence and degradability:        |      |       |       |      |                                     | ,  | Readily<br>biodegradable                  |
| 12.3. Bioaccumulative potential:            | BCF  | 42d   | <2,8  |      | Cyprinus caprio                     | OECD 305<br>(Bioconcentration -<br>Flow-Through<br>Fish Test)  | Not to be<br>expected                     |
| 12.4. Mobility in soil:                     |      |       |       |      |                                     |  | No adsorption in soil.                    |
| 12.5. Results of PBT<br>and vPvB assessment |      |       |       |      |                                     |  | No PBT<br>substance, No<br>vPvB substance |
| Toxicity to bacteria:                       | EC20 | 30min | >1000 | mg/l | activated sludge                    | OECD 209<br>(Activated Sludge,<br>Respiration<br>Inhibition Test<br>(Carbon and<br>Ammonium<br>Oxidation)) |   |

| Toxicity / effect                           | Endpoint  | Time | Value          | Unit | Organism                            | Test method   | Notes                                     |
|---|-----------|------|----------------|------|-------------------------------------|---|---|
| 12.1. Toxicity to fish:                     | LC50      | 96h  | 0,188          | mg/l | Oncorhynchus<br>mykiss              | OECD 203 (Fish,<br>Acute Toxicity<br>Test)  |   |
| 12.1. Toxicity to fish:                     | NOEC/NOEL | 28d  | 0,098          | mg/l | Oncorhynchus<br>mykiss              | OECD 210 (Fish,<br>Early-Life Stage<br>Toxicity Test)   |   |
| 12.1. Toxicity to daphnia:                  | NOEC/NOEL | 21d  | 0,004          | mg/l | Daphnia magna                       | OECD 211<br>(Daphnia magna<br>Reproduction Test)  |   |
| 12.1. Toxicity to daphnia:                  | EC50      | 48h  | 0,1            | mg/l | Daphnia magna                       | . ,   |   |
| 12.1. Toxicity to algae:                    | NOEC/NOEL | 72h  | 0,0012         | mg/l | Pseudokirchneriell<br>a subcapitata | OECD 201 (Alga,<br>Growth Inhibition<br>Test)   |   |
| 12.1. Toxicity to algae:                    | EC50      | 48h  | 0,0052         | mg/l | Skeletonema costatum                | ISO 10253   |   |
| 12.1. Toxicity to algae:                    | NOEC/NOEL | 48h  | 0,00064        | mg/l | Skeletonema<br>costatum             | ISO 10253   |   |
| 12.2. Persistence and degradability:        |           |      | >80            | %    | activated sludge                    | OECD 303 A<br>(Simulation Test -<br>Aerobic Sewage<br>Treatment -<br>Activated Sludge<br>Units) |   |
| 12.3. Bioaccumulative potential:            | BCF       |      | 3,16           |      |                                     | ,   | calculated value                          |
| 12.3. Bioaccumulative potential:            | Log Pow   |      | -0,71-<br>0,75 |      |                                     | OECD 107<br>(Partition<br>Coefficient (n-<br>octanol/water) -<br>Shake Flask<br>Method)         |   |
| 12.5. Results of PBT<br>and vPvB assessment |           |      |                |      |                                     |   | No PBT<br>substance, No<br>vPvB substance |



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|--|---|----|--------------|-----------------|---------------------|--|
| Toxicity to bacteria:  | EC50                                    | 3h | 7,92         | mg/l            | activated sludge    | OECD 209<br>(Activated Sludge,<br>Respiration<br>Inhibition Test<br>(Carbon and<br>Ammonium<br>Oxidation)) |

## **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

### For the substance / mixture / residual amounts

EC disposal code no.:

GB

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)

07 06 01 aqueous washing liquids and mother liquors

20 01 29 detergents containing hazardous substances Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

### 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**

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

| 14.1. UN number or ID number:                        | Not applicable |
|--|----------------|
| 14.2. UN proper shipping name:                       |                |
| Not applicable                                       |                |
| 14.3. Transport hazard class(es):                    | Not applicable |
| 14.4. Packing group:                                 | Not applicable |
| 14.5. Environmental hazards:                         | Not applicable |
| Tunnel restriction code:                             | Not applicable |
| Classification code:                                 | Not applicable |
| LQ:  | Not applicable |
| Transport category:                                  | Not applicable |
| Transport by sea (IMDG-code)                         |                |
| 14.1. UN number or ID number:                        | Not applicable |
| 14.2. UN proper shipping name:                       |                |
| Not applicable                                       |                |
| 14.3. Transport hazard class(es):                    | Not applicable |
| 14.4. Packing group:                                 | Not applicable |
| 14.5. Environmental hazards:                         | Not applicable |
| Marine Pollutant:                                    | Not applicable |
| EmS:   | Not applicable |
| Transport by air (IATA)                              |                |
| 14.1. UN number or ID number:                        | Not applicable |
|  | Not applicable |
| 14.2. UN proper shipping name:<br>Not applicable     |                |
| 14.3. Transport hazard class(es):                    | Not applicable |
|  | Not applicable |
| 14.4. Packing group:<br>14.5. Environmental hazards: | Not applicable |
| 14.3. Environmental hazarus.                         | Not applicable |
|  |                |



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### 14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

14.7. Maritime transport in bulk according to IMO instruments

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

0,101 %

Observe restrictions:

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)! Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): **REGULATION (EC) No 648/2004** 5 % or over but less than 15 %

non-ionic surfactants less than 5 % anionic surfactants

METHYLCHLOROISOTHIAZOLINONE/ METHYLISOTHIAZOLINONE

Treated goods as per Regulation (EU) No. 528/2012 must display specific information on the label. Please note Article 58 paragraph (3) subparagraph 2 of Regulation (EU) No. 528/2012. Approval of the biocidal active substance may mean that special conditions are required for marketing the treated goods. These are indicated in the approval of the active substance.

National requirements/regulations on safety and health protection must be applied when using work equipment.

### **15.2 Chemical safety assessment**

A chemical safety assessment is not provided for mixtures.

### **SECTION 16: Other information**

4, 9, 11

Revised sections: These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials 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<br>(EC) No. 1272/2008 (CLP) | Evaluation method used                             |
|--|--|
| Eye Dam. 1, H318   | Classification according to calculation procedure. |

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents. H330 Fatal if inhaled.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H301 Toxic if swallowed.

H302 Harmful if swallowed. H311 Toxic in contact with skin.

H311 TOXIC IN CONTACT WITH SKIN

H315 Causes skin irritation.

H318 Causes serious eye damage. H331 Toxic if inhaled.



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H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH071 Corrosive to the respiratory tract.

Eye Dam. — Serious eye damage Acute Tox. — Acute toxicity - oral Aquatic Chronic — Hazardous to the aquatic environment - chronic Skin Irrit. — Skin irritation Flam. Liq. — Flammable liquid Acute Tox. — Acute toxicity - dermal Acute Tox. — Acute toxicity - inhalation Skin Corr. — Skin corrosion Repr. — Reproductive toxicity Skin Sens. — Skin sensitization Aquatic Acute — Hazardous to the aquatic environment - acute

### Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany). EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

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

according, according to acc., acc. to ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate Bundesanstalt für Materialforschung und -prüfung (= Federal Institute for Materials Research and Testing, Germany) BAM BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF **Bioconcentration factor** BSEF The International Bromine Council CAS **Chemical Abstracts Service** CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon for example (abbreviation of Latin 'exempli gratia'), for instance e.g. EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants) European Community FC ECHA European Chemicals Agency ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect European Economic Community EEC EINECS European Inventory of Existing Commercial Chemical Substances **FLINCS** European List of Notified Chemical Substances ΕN **European Norms** EPA United States Environmental Protection Agency (United States of America)



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|--------------------|--|---|
|                    | or Cleaner   |   |
| FrCy F             | ΞμCx, ErLx (x = 10, 50)  | Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)  |
| etc.               | et cetera  |   |
| EU                 | European Union   |   |
|                    | Ethylene-vinyl alcohol cop   | olymer  |
| Fax.               | Fax number   |   |
| gen.<br>GHS        | general<br>Globally Harmonized Syst  | em of Classification and Labelling of Chemicals   |
| GWP                | Global warming potential   | en of oldssinedion and Labelling of onemicals   |
| Koc                | Adsorption coefficient of o  | rganic carbon in the soil   |
| Kow                | octanol-water partition coe  |   |
| IARC               | International Agency for R   |   |
|                    | International Air Transport  |   |
| IBC (Co<br>IMDG-o  |  | lk Chemical (Code)<br>ritime Code for Dangerous Goods   |
| incl.              | including, inclusive   |   |
|                    |  | mical Information Database  |
| UPAC               | International Union for Pu   | re Applied Chemistry  |
|                    | Lethal Concentration to 50   |   |
|                    |  | est population (Median Lethal Dose)   |
| Log Ko             |  | sorption coefficient of organic carbon in the soil<br>thm of octanol-water partition coefficient  |
| LOG KU<br>LQ       | Limited Quantities   |   |
| MARP               |  | nvention for the Prevention of Marine Pollution from Ships  |
| mg/kg l            |  |   |
|                    | bw/d, mg/kg bw/day mg/kg   | body weight/day   |
| mg/kg              |  |   |
| mg/kg              |  | nt  |
| n.a.               | not applicable<br>not available  |   |
| n.av.<br>n.c.      | not checked  |   |
|                    | no data available  |   |
|                    |  | pational Safety and Health (USA)  |
| NLP                | No-longer-Polymer  |   |
|                    |  | fect Concentration/Level  |
|                    |  | c Co-operation and Development  |
| org.               | organic  | Loolth Administration (LISA)  |
| PBT                | persistent, bioaccumulativ   | Health Administration (USA)   |
| PE                 | Polyethylene   |   |
|                    | Predicted No Effect Conce  | entration   |
| ppm                | parts per million  |   |
| PVC                | Polyvinylchloride  |   |
|                    |  | Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration,   |
|                    | tion, Authorisation and Res<br>H-IT List-No. 6/7/8/9                                 |   |
|                    |  | Oxx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical<br>ve any legal significance, rather they are purely technical identifiers for processing a submission via REACH- |
| RID                |  | transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International  |
| SVHC               | ge of Dangerous Goods by<br>Substances of Very High (                                |   |
| Геl.<br>ГОС        | Telephone  |   |
| JN RT              | Total organic carbon   | Recommendations on the Transport of Dangerous Goods   |
| VOC                | Volatile organic compound  |   |
|                    | very persistent and very b   | ioaccumulative  |
| vPvB               |  |   |

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