

| Version | Revision Date: | SDS Number:  | Date of last issue: 28.10.2016  |
|---------|----------------|--------------|---------------------------------|
| 7.2     | 16.03.2017     | 802836-00005 | Date of first issue: 11.06.2010 |

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

| 1.1 Product identifier<br>Trade name | :     | INDUSTRIAL STRENGTH CLEANING WIPES - 90 CLOTHES  |
|--------------------------------------|-------|--|
| Product code                         | :     | 089090090  |
| 1.2 Relevant identified uses of t    | the s | substance or mixture and uses advised against  |
| Use of the Sub-<br>stance/Mixture    | :     | Cosmetic products  |
| Recommended restrictions on use      | :     | This is a personal care or cosmetic product that is safe for<br>consumers and other users under normal and reasonably<br>foreseeable use. Cosmetics and consumer products, specifi-<br>cally defined by regulations around the world, are exempt from<br>the requirement of an SDS for the consumer. While this mate-<br>rial is not considered hazardous, this SDS contains valuable<br>information critical to the safe handling and proper use of the<br>product for industrial workplace conditions as well as unusual |

and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

#### 1.3 Details of the supplier of the safety data sheet

| Company   | : | Adolf Wuerth GmbH & Co. KG<br>Reinhold-Würth-Str. 12-17<br>74653 Künzelsau |
|---|---|--|
| Telephone   | : | +49 794015 0   |
| Telefax   | : | +49 794015 10 00   |
| E-mail address of person<br>responsible for the SDS | : | prodsafe@wuerth.com  |

#### **1.4 Emergency telephone number**

Giftnotrufzentrale Berlin +49 30 30686 790. Gesellschaft (07:00 – 18:00 Uhr) +49 794015 2552

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

### Classification (REGULATION (EC) No 1272/2008)

| Serious eye damage, Category 1 | H318: Causes serious eye damage. |
|--------------------------------|----------------------------------|
|--------------------------------|----------------------------------|



| /ersion<br>7.2 | Revision Date:<br>16.03.2017       | SDS Number<br>802836-0000 |  |
|----------------|------------------------------------|---------------------------|--|
| Skin s         | sensitisation, Categor             | y 1                       | H317: May cause an allergic skin reaction.   |
| Chror          | nic aquatic toxicity, Ca           | ategory 3                 | H412: Harmful to aquatic life with long lasting effects.   |
| .2 Label       | elements                           |                           |  |
|                | Iling (REGULATION<br>rd pictograms | (EC) No 1272/20           |  |
| Signa          | l word                             | : Danger                  |  |
| Haza           | rd statements                      | H318 Ca                   | ay cause an allergic skin reaction.<br>huses serious eye damage.<br>hrmful to aquatic life with long lasting effects.  |
| Preca          | autionary statements               | of the work<br>P273 Av    | ntaminated work clothing should not be allowed out   |
|                |                                    | with water sent and e     | <ul> <li>51 + P338 + P310 IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses, if preasy to do. Continue rinsing. Immediately call a CENTER/doctor.</li> <li>13 If skin irritation or rash occurs: Get medical ention.</li> <li>64 Take off contaminated clothing and wash it</li> </ul> |

D-Glucopyranose, Oligomeric, C8-10 Glycosides (R)-p-mentha-1,8-diene

#### 2.3 Other hazards

None known.

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

#### 3.2 Mixtures

#### Hazardous components

| Chemical name | CAS-No. | Classification | Concentration |
|---------------|---------|----------------|---------------|
|               | EC-No.  |                | (% w/w)       |



| Version<br>7.2 | Revision Date: 16.03.2017 | SDS Number:<br>802836-00005 |
|----------------|---------------------------|-----------------------------|
|                |                           |                             |

Date of last issue: 28.10.2016 Date of first issue: 11.06.2010

|  | Index-No.<br>Registration number       |  |                  |
|--|--|--|------------------|
| D-Glucopyranose, Oligomeric,<br>C8-10 Glycosides | 68515-73-1<br>500-220-1                | Eye Dam. 1; H318   | >= 1 - < 3       |
| (R)-p-mentha-1,8-diene                           | 5989-27-5<br>227-813-5<br>601-029-00-7 | Flam. Liq. 3; H226<br>Skin Irrit. 2; H315<br>Skin Sens. 1B; H317<br>Asp. Tox. 1; H304<br>Aquatic Acute 1;<br>H400<br>Aquatic Chronic 1;<br>H410  | >= 1 - < 2,5     |
| Glucopyranose, oligomeric C10-<br>16 glycosides  | 110615-47-9                            | Skin Irrit. 2; H315<br>Eye Dam. 1; H318  | >= 1 - < 3       |
| 2-Bromo-2-nitro- 1,3-propanediol                 | 52-51-7<br>200-143-0<br>603-085-00-8   | Acute Tox. 3; H301<br>Acute Tox. 3; H331<br>Acute Tox. 4; H312<br>Skin Irrit. 2; H315<br>Eye Dam. 1; H318<br>STOT SE 3; H335<br>Aquatic Acute 1;<br>H400<br>Aquatic Chronic 2;<br>H411 | >= 0,025 - < 0,1 |

For explanation of abbreviations see section 16.

# **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

| General advice             | : | In the case of accident or if you feel unwell, seek medical ad-<br>vice immediately.<br>When symptoms persist or in all cases of doubt seek medical<br>advice.   |
|----------------------------|---|--|
| Protection of first-aiders | : | First Aid responders should pay attention to self-protection,<br>and use the recommended personal protective equipment<br>when the potential for exposure exists.  |
| If inhaled                 | : | If inhaled, remove to fresh air.<br>Get medical attention if symptoms occur.   |
| In case of skin contact    | : | In case of contact, immediately flush skin with plenty of water.<br>Remove contaminated clothing and shoes.<br>Get medical attention.<br>Wash clothing before reuse.<br>Thoroughly clean shoes before reuse. |
| In case of eye contact     | : | In case of contact, immediately flush eyes with plenty of water<br>for at least 15 minutes.<br>If easy to do, remove contact lens, if worn.<br>Get medical attention immediately.                            |



| Vers<br>7.2 | ion   | Revision Date:<br>16.03.2017 |      | OS Number:<br>2836-00005  | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010      |  |
|-------------|---|------------------------------|------|---|--|--|
|             | lf swalld   | owed                         | :    | Get medical atter   | NOT induce vomiting.<br>ition if symptoms occur.<br>oughly with water. |  |
| 4.2 N       | /lost im  | portant symptoms ar          | nd e | effects, both acute   | e and delayed  |  |
|             | Risks   |                              | :    | May cause an alle<br>Causes serious e                                 | ergic skin reaction.<br>ye damage.                                     |  |
|             |   | •                            | meo  |   | d special treatment needed   |  |
|             | Treatm  | ent                          | :    | Treat symptomati  | cally and supportively.  |  |
| SEC         | SECTION 5: Firefighting measures                          |                              |      |   |  |  |
| 5.1 E       | Extingu   | ishing media                 |      |   |  |  |
|             | Suitable  | e extinguishing media        | :    | Water spray<br>Alcohol-resistant<br>Carbon dioxide (0<br>Dry chemical |  |  |
|             | Unsuita<br>media  | ble extinguishing            | :    | None known.   |  |  |
| 5.2 S       | 5.2 Special hazards arising from the substance or mixture |                              |      |   |  |  |

| Specific hazards during fire-<br>fighting | : | Exposure to combustion products may be a hazard to health. |
|---|---|--|
| Hazardous combustion prod-<br>ucts        | : | Carbon oxides  |
| 5.3 Advice for firefighters               |   |  |

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

# for firefighters Use personal protective equipment. Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

# **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

| Personal precautions | : | Use personal protective equipment.                         |
|----------------------|---|--|
|                      |   | Follow safe handling advice and personal protective equip- |



| Version<br>7.2            | Revision Date:<br>16.03.2017 | SDS Number:<br>802836-00005   | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010   |  |  |  |  |
|---------------------------|------------------------------|---|---|--|--|--|--|
|                           |                              | ment recomme  | endations.  |  |  |  |  |
| 6.2 Enviro                | nmental precautions          |   |   |  |  |  |  |
| Enviro                    | nmental precautions          | Prevent furthe<br>Prevent sprea<br>barriers).<br>Retain and dis<br>Local authoriti  | Prevent further leakage or spillage if safe to do so.<br>Prevent spreading over a wide area (e.g. by containment or oil   |  |  |  |  |
| 6.3 Method                | Is and material for co       | ntainment and clea  | aning up  |  |  |  |  |
| Methods for cleaning up : |                              | For large spills<br>ment to keep r<br>be pumped, st<br>Clean up rema<br>bent.<br>Local or natior<br>posal of this m<br>employed in th<br>mine which rep<br>Sections 13 ar | nert absorbent material.<br>s, provide dyking or other appropriate contain-<br>material from spreading. If dyked material can<br>ore recovered material in appropriate container.<br>aining materials from spill with suitable absor-<br>nal regulations may apply to releases and dis-<br>taterial, as well as those materials and items<br>be cleanup of releases. You will need to deter-<br>gulations are applicable.<br>Ind 15 of this SDS provide information regarding<br>r national requirements. |  |  |  |  |

# 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

| Technical measures      | : | See Engineering measures under EXPOSURE<br>CONTROLS/PERSONAL PROTECTION section.  |
|-------------------------|---|---|
| Local/Total ventilation | : | Use only with adequate ventilation.   |
| Advice on safe handling | : | Do not get on skin or clothing.<br>Avoid inhalation of vapour or mist.<br>Do not swallow.<br>Do not get in eyes.<br>Handle in accordance with good industrial hygiene and safety<br>practice.<br>Keep container tightly closed.<br>Take care to prevent spills, waste and minimize release to the<br>environment. |
| Hygiene measures        | : | Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.  |



| Vers<br>7.2                          | sion                     | Revision Date:<br>16.03.2017        |   | 0S Number:<br>2836-00005 | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010                          |
|--------------------------------------|--------------------------|-------------------------------------|---|--------------------------|--|
| 7.2 (                                | Conditic                 | ons for safe storage,               | incl  | uding any incom          | patibilities   |
|                                      | •                        | ements for storage<br>nd containers | :   |                          | labelled containers. Keep tightly closed.<br>nce with the particular national regulations. |
| Advice on common storage             |                          | :                                   | Do not store with the following product types:<br>Strong oxidizing agents |                          |  |
|                                      | Storage class (TRGS 510) |                                     | :   | 12, Non Combus           | tible Liquids  |
| Recommended storage tem-<br>perature |                          | :                                   | >0 °C   |                          |  |
|                                      | Specific<br>Specific     | e <b>end use(s)</b><br>c use(s)     | :   | No data available        |  |

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

# 8.1 Control parameters

# **Occupational Exposure Limits**

| Components  | CAS-No.  | Value type (Form of exposure) | Control parameters | Basis          |  |  |  |
|---|--|-------------------------------|--------------------|----------------|--|--|--|
| (R)-p-mentha-1,8-<br>diene                        | 5989-27-5  | AGW                           | 5 ppm<br>28 mg/m3  | DE TRGS<br>900 |  |  |  |
| Peak-limit: excur-<br>sion factor (catego-<br>ry) | 4;(II)   |                               |                    |                |  |  |  |
| Further information                               | Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child, Substance sensitizing through the skin |                               |                    |                |  |  |  |

# Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

| Substance name  | End Use   | Exposure routes | Potential health ef-<br>fects | Value                  |
|---|-----------|-----------------|-------------------------------|------------------------|
| D-Glucopyranose,<br>Oligomeric, C8-10<br>Glycosides   | Workers   | Inhalation      | Long-term systemic<br>effects | 420 mg/m3              |
|   | Workers   | Skin contact    | Long-term systemic<br>effects | 595000 mg/kg<br>bw/day |
|   | Consumers | Inhalation      | Long-term systemic<br>effects | 124 mg/m3              |
|   | Consumers | Skin contact    | Long-term systemic<br>effects | 357000 mg/kg<br>bw/day |
|   | Consumers | Ingestion       | Long-term systemic<br>effects | 35,7 mg/kg<br>bw/day   |
| Glucopyranose, oli-<br>gomeric C10-16 gly-<br>cosides | Workers   | Inhalation      | Long-term systemic<br>effects | 420 mg/m3              |



|                 | 16.03.2017                 | 802836-   | Doubs Date   | of first issue: 11.06.2010    |                      |
|-----------------|----------------------------|-----------|--------------|-------------------------------|----------------------|
|                 |                            | Workers   | Skin contact | Long-term systemic effects    | 595000 mg<br>bw/day  |
|                 |                            | Consumers | Inhalation   | Long-term systemic<br>effects | 124 mg/m3            |
|                 |                            | Consumers | Skin contact | Long-term systemic effects    | 357000 mg<br>bw/day  |
|                 |                            | Consumers | Ingestion    | Long-term systemic<br>effects | 35,7 mg/kg<br>bw/day |
| (R)-p-<br>diene | mentha-1,8-                | Workers   | Inhalation   | Long-term systemic<br>effects | 33,3 mg/m            |
|                 |                            | Workers   | Skin contact | Acute local effects           | 0,222 mg/c           |
|                 |                            | Consumers | Inhalation   | Long-term systemic<br>effects | 8,33 mg/m3           |
|                 |                            | Consumers | Skin contact | Acute local effects           | 0,111 mg/c           |
|                 |                            | Consumers | Ingestion    | Long-term systemic<br>effects | 4,76 mg/kg<br>bw/day |
| Sorbit          | an laurate                 | Workers   | Inhalation   | Long-term systemic effects    | 49,4 mg/m3           |
|                 |                            | Workers   | Skin contact | Long-term systemic<br>effects | 7 mg/kg<br>bw/day    |
|                 |                            | Consumers | Inhalation   | Long-term systemic<br>effects | 12,2 mg/m3           |
|                 |                            | Consumers | Skin contact | Long-term systemic<br>effects | 3,5 mg/kg<br>bw/day  |
|                 |                            | Consumers | Ingestion    | Long-term systemic<br>effects | 3,5 mg/kg<br>bw/day  |
| 2-Bror<br>propa | mo-2-nitro- 1,3-<br>nediol | Workers   | Inhalation   | Long-term systemic<br>effects | 4,1 mg/m3            |
|                 |                            | Workers   | Inhalation   | Acute systemic ef-<br>fects   | 12,3 mg/m3           |
|                 |                            | Workers   | Inhalation   | Long-term local ef-<br>fects  | 4,2 mg/m3            |
|                 |                            | Workers   | Inhalation   | Acute local effects           | 4,2 mg/m3            |
|                 |                            | Workers   | Skin contact | Long-term systemic<br>effects | 2,3 mg/kg<br>bw/day  |
|                 |                            | Workers   | Skin contact | Acute systemic ef-<br>fects   | 7 mg/kg<br>bw/day    |
|                 |                            | Workers   | Skin contact | Long-term local ef-<br>fects  | 0,013 mg/k<br>bw/day |
|                 |                            | Workers   | Skin contact | Acute local effects           | 0,013 mg/k<br>bw/day |
|                 |                            | Consumers | Inhalation   | Long-term systemic<br>effects | 1,2 mg/m3            |
|                 |                            | Consumers | Inhalation   | Acute systemic ef-<br>fects   | 3,7 mg/m3            |
|                 |                            | Consumers | Inhalation   | Long-term local ef-<br>fects  | 1,3 mg/m3            |
|                 |                            | Consumers | Inhalation   | Acute local effects           | 1,3 mg/m3            |
|                 |                            | Consumers | Skin contact | Long-term systemic effects    | 1,4 mg/kg<br>bw/day  |
|                 |                            | Consumers | Skin contact | Acute systemic ef-<br>fects   | 4,2 mg/kg<br>bw/day  |



| Vers<br>7.2 | sion Revision Date:<br>16.03.2017 | SDS Number:<br>802836-00005 |            | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010 |                               |                       |
|-------------|-----------------------------------|-----------------------------|------------|---|-------------------------------|-----------------------|
|             |                                   | Consumers                   | Skin conta | act   | Long-term local ef-<br>fects  | 0,008 mg/kg<br>bw/day |
|             |                                   | Consumers                   | Skin conta | act   | Acute local effects           | 0,008 mg/kg<br>bw/day |
|             |                                   | Consumers                   | Ingestion  |   | Long-term systemic<br>effects | 0,35 mg/kg<br>bw/day  |
|             |                                   | Consumers                   | Ingestion  |   | Acute systemic ef-<br>fects   | 1,1 mg/kg<br>bw/day   |

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

| Substance name                                  | Environmental Compartment  | Value                |
|---|----------------------------|----------------------|
| D-Glucopyranose, Oligomeric,                    | Fresh water                | 0,176 mg/l           |
| C8-10 Glycosides                                | FIESH WALEI                | 0,176 mg/i           |
|   | Marine water               | 0,0176 mg/l          |
|   | Intermittent use/release   | 0,27 mg/l            |
|   | Fresh water sediment       | 1,516 mg/kg          |
|   | Sewage treatment plant     | 560 mg/l             |
|   | Marine sediment            | 0,152 mg/kg          |
|   | Soil                       |                      |
|   |                            | 0,654 mg/kg          |
|   | Oral (Secondary Poisoning) | 111,11 mg/kg<br>food |
| Glucopyranose, oligomeric C10-<br>16 glycosides | Fresh water                | 0,176 mg/l           |
|   | Marine water               | 0,018 mg/l           |
|   | Intermittent use/release   | 0,0295 mg/l          |
|   | Sewage treatment plant     | 5000 mg/l            |
|   | Fresh water sediment       | 1,516 mg/kg          |
|   | Marine sediment            | 0,065 mg/kg          |
|   | Soil                       | 0,654 mg/kg          |
|   | Oral (Secondary Poisoning) | 111,11 mg/kg         |
|   |                            | food                 |
| (R)-p-mentha-1,8-diene                          | Fresh water                | 0,0054 mg/l          |
|   | Marine water               | 0,00054 mg/l         |
|   | Sewage treatment plant     | 1,8 mg/l             |
|   | Fresh water sediment       | 1,32 mg/kg           |
|   | Marine sediment            | 0,13 mg/kg           |
|   | Soil                       | 0,262 mg/kg          |
| _   | Oral (Secondary Poisoning) | 3,33 mg/kg food      |
| Sorbitan laurate                                | Fresh water                | 0,2 mg/l             |
|   | Marine water               | 0,02 mg/l            |
|   | Intermittent use/release   | 0,179 mg/l           |
|   | Fresh water sediment       | 1,141 mg/kg          |
|   | Marine sediment            | 1,141 mg/kg          |
| 2-Bromo-2-nitro- 1,3-propanediol                | Fresh water                | 0,01 mg/l            |
|   | Marine water               | 0,0008 mg/l          |
|   | Intermittent use/release   | 0,0025 mg/l          |
|   | Sewage treatment plant     | 0,43 mg/l            |
|   | Fresh water sediment       | 0,041 mg/kg          |
|   |                            |                      |
|   | Marine sediment            | 0,00328 mg/kg        |
|   | Soil                       | 0,5 mg/kg            |



| Version | Revision Date: | SDS Number:  | Date of last issue: 28.10.2016  |
|---------|----------------|--------------|---------------------------------|
| 7.2     | 16.03.2017     | 802836-00005 | Date of first issue: 11.06.2010 |

#### 8.2 Exposure controls

#### Engineering measures

Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

| Personal protective equipmen  | t  |
|-------------------------------|--|
| Eye protection :              | Wear the following personal protective equipment:<br>Chemical resistant goggles must be worn.<br>If splashes are likely to occur, wear:<br>Face-shield   |
| Hand protection<br>Material : | Chemical-resistant gloves  |
| Remarks :                     | Choose gloves to protect hands against chemicals depending<br>on the concentration and quantity of the hazardous sub-<br>stance and specific to place of work. Breakthrough time is not<br>determined for the product. Change gloves often! For special<br>applications, we recommend clarifying the resistance to<br>chemicals of the aforementioned protective gloves with the<br>glove manufacturer. Wash hands before breaks and at the<br>end of workday. |
| Skin and body protection :    | Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.<br>Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).  |
| Respiratory protection :      | Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.  |
| Filter type :                 | Organic vapour type (A)  |

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

#### 9.1 Information on basic physical and chemical properties

| Appearance                   | : | Liquid absorbed by inert carrier material |
|------------------------------|---|---|
| Colour                       | : | colourless                                |
| Odour                        | : | like fruit                                |
| Odour Threshold              | : | No data available                         |
| рН                           | : | 7 - 7,5<br>concentrate                    |
| Melting point/freezing point | : | ca. 0 °C                                  |



| Vers<br>7.2 |   | Revision Date:<br>16.03.2017          |   | S Number:<br>2836-00005             | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010 |
|-------------|---|---------------------------------------|---|-------------------------------------|---|
|             | Initial bo<br>range                         | iling point and boiling               | : | > 100 °C                            |   |
|             | Flash point                                 |                                       | : | Not applicable<br>Other informatior | n: Will not burn  |
|             | Evapora                                     | tion rate                             | : | No data available                   | 9   |
|             | Flamma                                      | bility (solid, gas)                   | : | Not applicable                      |   |
|             | Upper ex<br>flammab                         | xplosion limit / Upper<br>ility limit | : | No data available                   | 2   |
|             | Lower ex<br>flammab                         | xplosion limit / Lower<br>ility limit | : | No data available                   |   |
|             | Vapour p                                    | pressure                              | : | No data available                   | 2   |
|             | Relative vapour density<br>Relative density |                                       | : | > 1<br>(Air = 1.0)                  |   |
|             |   |                                       | : | No data available                   | )   |
|             | Density                                     |                                       | : | 0,97 g/cm3 (20 °                    | C)  |
|             | Solubility<br>Wate                          | /(ies)<br>r solubility                | : | partly soluble                      |   |
|             | Solut                                       | pility in other solvents              | : | emulsifiable                        |   |
|             | Partition<br>octanol/\                      | coefficient: n-<br>water              | : | Not applicable                      |   |
|             | Auto-ign                                    | ition temperature                     | : | No data available                   | 2   |
|             | Decomp                                      | osition temperature                   | : | No data available                   | 2   |
|             | Viscosity<br>Visco                          | /<br>sity, kinematic                  | : | < 20,5 mm2/s (40                    | ) °C)   |
|             | Explosiv                                    | e properties                          | : | Not explosive                       |   |
|             | Oxidizin                                    | g properties                          | : | The substance of                    | r mixture is not classified as oxidizing.                         |
| 9.2         | Other inf                                   | ormation                              |   |                                     |   |
|             | Particle                                    |                                       | : | Not applicable                      |   |
|             | Self-ignit                                  | tion                                  | : | not auto-flammab                    | le  |



| Version<br>7.2 | Revision Date: 16.03.2017 | SDS Number:<br>802836-00005 | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010 |  |
|----------------|---------------------------|-----------------------------|---|--|
|                |                           |                             |   |  |

# SECTION 10: Stability and reactivity

| <b>10.1 Reactivity</b><br>Not classified as a reactivity hazard. |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| 10.2 Chemical stability  |  |  |  |  |  |  |
| Stable under normal conditions.                                  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 10.3 Possibility of hazardous react                              |  |  |  |  |  |  |
| Hazardous reactions  | : Can react with strong oxidizing agents.  |  |  |  |  |  |
| 10.4 Conditions to avoid   |  |  |  |  |  |  |
| Conditions to avoid  | : None known.  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 10.5 Incompatible materials                                      |  |  |  |  |  |  |
| Materials to avoid   | : Oxidizing agents   |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 10.6 Hazardous decomposition pro                                 | oducts   |  |  |  |  |  |
| No hazardous decomposition pr                                    |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| SECTION 11: Toxicological info                                   | ormation   |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 11.1 Information on toxicological e                              |  |  |  |  |  |  |
| Information on likely routes of :                                | Inhalation<br>Skin contact   |  |  |  |  |  |
| exposure   | Ingestion  |  |  |  |  |  |
|  | Eye contact  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Acute toxicity   |  |  |  |  |  |  |
| Not classified based on available                                | e information.   |  |  |  |  |  |
| Components:  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| D-Glucopyranose, Oligomeric                                      | · • •  |  |  |  |  |  |
| Acute oral toxicity :  | LD50 (Rat): > 2.000 mg/kg<br>Method: OECD Test Guideline 423                             |  |  |  |  |  |
|  | Assessment: The substance or mixture has no acute oral tox-                              |  |  |  |  |  |
|  | icity  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Acute dermal toxicity :  | LD50 (Rabbit): > 2.000 mg/kg<br>Assessment: The substance or mixture has no acute dermal |  |  |  |  |  |
|  | toxicity   |  |  |  |  |  |
|  | •  |  |  |  |  |  |
| (R)-p-mentha-1,8-diene:  |  |  |  |  |  |  |
| Acute oral toxicity :  | LD50 (Rat): > 2.000 mg/kg  |  |  |  |  |  |
| ,  | Assessment: The substance or mixture has no acute oral tox-                              |  |  |  |  |  |
|  | icity<br>Demontos Decederador deteríore electricita                                      |  |  |  |  |  |
|  | Remarks: Based on data from similar materials  |  |  |  |  |  |



| Vers<br>7.2 | sion    | Revision Date:<br>16.03.2017 |     | DS Number:<br>02836-00005   | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010 |
|-------------|---------|------------------------------|-----|---|---|
|             |         |                              |     |   |   |
|             | Gluco   | pyranose, oligomeric         | C1  | 0-16 glycosides:  |   |
|             | Acute   | oral toxicity                | :   | LD50 (Rat): > 5.0   | 00 mg/kg  |
|             | Acute   | dermal toxicity              | :   | LD50 (Rabbit): ><br>Assessment: The<br>toxicity                               | 2.000 mg/kg<br>substance or mixture has no acute dermal           |
|             | 2-Bror  | no-2-nitro- 1,3-propa        | ned | iol:  |   |
|             | Acute   | oral toxicity                | :   | LD50 (Rat): 193 -   | 211 mg/kg   |
|             | Acute i | inhalation toxicity          | :   | LC50 (Rat): > 0,5<br>Exposure time: 4<br>Test atmosphere:                     | h   |
|             |         |                              |     | LC50 (Rat): > 0,1<br>Exposure time: 4<br>Test atmosphere:                     | h   |
|             | Acute   | dermal toxicity              | :   | Acute toxicity esti<br>Method: Expert ju<br>Remarks: Based<br>1272/2008, Anne | dgement<br>on harmonised classification in EU regulation          |

### Skin corrosion/irritation

Not classified based on available information.

#### Components:

### D-Glucopyranose, Oligomeric, C8-10 Glycosides:

Species: Rabbit Method: OECD Test Guideline 404 Result: No skin irritation

### (R)-p-mentha-1,8-diene:

Species: Rabbit Result: Skin irritation

# Glucopyranose, oligomeric C10-16 glycosides:

Species: Rabbit Method: OECD Test Guideline 404 Result: Skin irritation

### 2-Bromo-2-nitro- 1,3-propanediol:

Species: Rabbit Result: Skin irritation



| Version | Revision Date: | SDS Number:  |
|---------|----------------|--------------|
| 7.2     | 16.03.2017     | 802836-00005 |

Date of last issue: 28.10.2016 Date of first issue: 11.06.2010

#### Serious eye damage/eye irritation

Causes serious eye damage.

#### Components:

#### D-Glucopyranose, Oligomeric, C8-10 Glycosides:

Species: Rabbit Method: OECD Test Guideline 405 Result: Irreversible effects on the eye Remarks: Based on data from similar materials

### (R)-p-mentha-1,8-diene:

Species: Rabbit Result: No eye irritation

#### Glucopyranose, oligomeric C10-16 glycosides:

Species: Rabbit Method: OECD Test Guideline 405 Result: Irreversible effects on the eye

#### 2-Bromo-2-nitro- 1,3-propanediol:

Species: Rabbit Result: Irreversible effects on the eye

### Respiratory or skin sensitisation

**Skin sensitisation** May cause an allergic skin reaction.

#### **Respiratory sensitisation**

Not classified based on available information.

#### Components:

#### D-Glucopyranose, Oligomeric, C8-10 Glycosides:

Test Type: Maximisation Test Exposure routes: Skin contact Species: Guinea pig Method: Directive 67/548/EEC, Annex V, B.6. Result: negative

#### (R)-p-mentha-1,8-diene:

Test Type: Local lymph node assay (LLNA) Exposure routes: Skin contact Species: Mouse Result: positive

Assessment: Probability or evidence of low to moderate skin sensitisation rate in humans



| Version | Revision Date: | SDS Number:  | Date of last issue: 28.10.2016  |
|---------|----------------|--------------|---------------------------------|
| 7.2     | 16.03.2017     | 802836-00005 | Date of first issue: 11.06.2010 |

#### Glucopyranose, oligomeric C10-16 glycosides:

Test Type: Buehler Test Exposure routes: Skin contact Species: Guinea pig Method: OECD Test Guideline 406 Result: negative

### 2-Bromo-2-nitro- 1,3-propanediol:

Test Type: Maximisation Test Exposure routes: Skin contact Species: Guinea pig Result: negative

### Germ cell mutagenicity

Not classified based on available information.

#### **Components:**

#### D-Glucopyranose, Oligomeric, C8-10 Glycosides:

| Genotoxicity in vitro       | :                | Test Type: In vitro mammalian cell gene mutation test<br>Method: OECD Test Guideline 476<br>Result: negative  |  |
|-----------------------------|------------------|---|--|
| Genotoxicity in vivo        | :                | Test Type: Mammalian erythrocyte micronucleus test (in v<br>cytogenetic assay)<br>Species: Mouse<br>Application Route: Intraperitoneal injection<br>Method: OECD Test Guideline 474<br>Result: negative |  |
| (R)-p-mentha-1,8-diene:     |                  |   |  |
| Genotoxicity in vitro       | :                | Test Type: In vitro mammalian cell gene mutation test<br>Result: negative   |  |
| Genotoxicity in vivo        | :                | Test Type: Transgenic rodent somatic cell gene mutation as-<br>say<br>Species: Rat<br>Application Route: Ingestion<br>Result: negative  |  |
| Glucopyranose, oligomeric C | :10 <sup>-</sup> | -16 glycosides:   |  |
| Genotoxicity in vitro       | :                | Test Type: Chromosome aberration test in vitro<br>Method: OECD Test Guideline 473<br>Result: negative   |  |
| Genotoxicity in vivo        | :                | Test Type: Mammalian erythrocyte micronucleus test (in vivo<br>cytogenetic assay)<br>Species: Mouse<br>Application Route: Intraperitoneal injection<br>Method: OECD Test Guideline 474                  |  |



| Version<br>7.2        | Revision Date: 16.03.2017 | SDS Number:<br>802836-00005 | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010  |  |  |
|-----------------------|---------------------------|-----------------------------|--|--|--|
|                       |                           | Result: negativ             | e  |  |  |
| 2-Bro                 | omo-2-nitro- 1,3-prop     | panediol:                   |  |  |  |
| Genotoxicity in vitro |                           |                             | Test Type: In vitro mammalian cell gene mutation test<br>Result: negative  |  |  |
| Geno                  | Genotoxicity in vivo :    |                             | Test Type: Mammalian erythrocyte micronucleus test (in vivo<br>cytogenetic assay)<br>Species: Mouse<br>Application Route: inhalation (dust/mist/fume)<br>Method: OECD Test Guideline 474<br>Result: negative |  |  |

#### Carcinogenicity

Not classified based on available information.

#### **Components:**

#### (R)-p-mentha-1,8-diene:

Species: Mouse Application Route: Ingestion Exposure time: 103 weeks Result: negative

# 2-Bromo-2-nitro- 1,3-propanediol:

Species: Rat Application Route: Ingestion Exposure time: 104 w Result: negative

#### **Reproductive toxicity**

Not classified based on available information.

#### **Components:**

### D-Glucopyranose, Oligomeric, C8-10 Glycosides:

| Effects on fertility               | : | Test Type: Reproduction/Developmental toxicity screening<br>test<br>Species: Rat<br>Application Route: Ingestion<br>Method: OECD Test Guideline 421<br>Result: negative<br>Remarks: Based on data from similar materials |
|------------------------------------|---|--|
| Effects on foetal develop-<br>ment | : | Test Type: Embryo-foetal development<br>Species: Rat<br>Application Route: Ingestion<br>Method: OECD Test Guideline 414<br>Result: negative<br>Remarks: Based on data from similar materials                             |



| Version<br>7.2 | Revision Date: 16.03.2017 | SDS Number:<br>802836-00005   | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010 |
|----------------|---------------------------|---|---|
| Gluco          | pyranose, oligomeric      | C10-16 glycosides:  |   |
| Effect         | s on fertility            | test<br>Species: Rat<br>Application Rou                                 | Test Guideline 421  |
| Effect<br>ment | s on foetal develop-      | Species: Rat<br>Application Rou   | Test Guideline 414  |
| 2-Bro          | mo-2-nitro- 1,3-propar    | nediol:   |   |
| Effect         | s on fertility            | : Test Type: One<br>Species: Rat<br>Application Rou<br>Result: negative |   |
| Effect<br>ment | s on foetal develop-      | : Test Type: Emb<br>Species: Rat<br>Application Rou<br>Result: negative |   |
| STOT           | - single exposure         |   |   |

Not classified based on available information.

### Components:

### 2-Bromo-2-nitro- 1,3-propanediol:

Assessment: May cause respiratory irritation.

### STOT - repeated exposure

Not classified based on available information.

#### Repeated dose toxicity

# Components:

# D-Glucopyranose, Oligomeric, C8-10 Glycosides:

Species: Rat NOAEL: 100 mg/kg Application Route: Ingestion Exposure time: 90 Days Method: Directive 67/548/EEC, Annex, B.26 Remarks: Based on data from similar materials

# (R)-p-mentha-1,8-diene:

Species: Rat



Version Revision Date: 7.2 16.03.2017

SDS Number: 802836-00005

Date of last issue: 28.10.2016 Date of first issue: 11.06.2010

NOAEL: 600 mg/kg Application Route: Ingestion Exposure time: 13 Weeks

### Glucopyranose, oligomeric C10-16 glycosides:

Species: Rat NOAEL: 1.000 mg/kg Application Route: Ingestion Exposure time: 90 Days Method: Directive 67/548/EEC, Annex, B.26

### 2-Bromo-2-nitro- 1,3-propanediol:

Species: Rat NOAEL: < 20 mg/kg LOAEL: 20 mg/kg Application Route: Ingestion Exposure time: 13 Weeks

#### Aspiration toxicity

Not classified based on available information.

#### Components:

### (R)-p-mentha-1,8-diene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

### **Components:**

| D-Glucopyranose, Oligomeric, C8-10 Glycosides:      |   |   |  |  |  |  |  |
|---|---|---|--|--|--|--|--|
| Toxicity to fish                                    | : | LC50 (Danio rerio (zebra fish)): 126 mg/l<br>Exposure time: 96 h  |  |  |  |  |  |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 100 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202 |  |  |  |  |  |
| Toxicity to algae                                   | : | EC50 (Desmodesmus subspicatus (green algae)): 27,22 mg/l<br>Exposure time: 72 h                         |  |  |  |  |  |
| Toxicity to microorganisms                          | : | EC50 (Pseudomonas putida): > 560 mg/l<br>Exposure time: 6 h   |  |  |  |  |  |
| Toxicity to fish (Chronic tox-<br>icity)            | : | NOEC: 1,8 mg/l<br>Exposure time: 28 d<br>Species: Danio rerio (zebra fish)                              |  |  |  |  |  |



| Vers<br>7.2 | ion                | Revision Date:<br>16.03.2017                            |     | 9S Number:<br>2836-00005  | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010   |
|-------------|--------------------|---|-----|---|---|
|             |                    |   |     | Method: OECD Te<br>Remarks: Based o   | est Guideline 204<br>on data from similar materials   |
|             |                    | y to daphnia and other<br>invertebrates (Chron-<br>ity) | :   | Exposure time: 21<br>Species: Daphnia                                       |   |
|             | (R)-p-n            | nentha-1,8-diene:                                       |     |   |   |
|             |                    | y to fish   | :   | LC50 (Pimephales<br>Exposure time: 96                                       | s promelas (fathead minnow)): 0,72 mg/l<br>5 h  |
|             |                    | y to daphnia and other<br>invertebrates                 | :   | EC50 (Daphnia m<br>Exposure time: 48  | agna (Water flea)): 0,36 mg/l<br>3 h  |
|             | Toxicity           | y to algae  | :   | Exposure time: 72<br>Test substance: W                                      | smus subspicatus (green algae)): 150 mg/l<br>2 h<br>Vater Accommodated Fraction<br>on data from similar materials |
|             | M-Fact<br>icity)   | or (Acute aquatic tox-                                  | :   | 1   |   |
|             | Glucor             | oyranose, oligomeric                                    | C10 | )-16 alvcosides:  |   |
|             | -                  | y to fish   | :   | •••   | (zebra fish)): 2,95 mg/l<br>S h   |
|             |                    | y to daphnia and other<br>invertebrates                 | :   | EC50 (Daphnia m<br>Exposure time: 48  | agna (Water flea)): 7 mg/l<br>3 h   |
|             | Toxicity           | y to algae  | :   | EC50 (Desmodes<br>Exposure time: 72   | mus subspicatus (green algae)): 12,5 mg/l<br>2 h  |
|             | Toxicity           | y to microorganisms                                     | :   | EC0 (Pseudomon<br>Exposure time: 16<br>Method: DIN 38 4                     |   |
|             | Toxicity<br>icity) | y to fish (Chronic tox-                                 | :   | NOEC: 1,8 mg/l<br>Exposure time: 28<br>Species: Danio re<br>Method: OECD Te | rio (zebra fish)  |
|             |                    | y to daphnia and other<br>invertebrates (Chron-<br>ity) | :   | EC10: 1,76 mg/l<br>Exposure time: 21<br>Species: Daphnia                    | d<br>magna (Water flea)   |
|             | 2-Bron             | no-2-nitro- 1,3-propan                                  | edi | ol:   |   |
|             | Toxicity           | y to fish   | :   | LC50 (Lepomis m<br>Exposure time: 96  | acrochirus (Bluegill sunfish)): 35,7 mg/l<br>S h  |



| Ver<br>7.2 | sion                      | Revision Date:<br>16.03.2017                            |     | OS Number:<br>2836-00005   | Date of last issue: 28.10.2016<br>Date of first issue: 11.06.2010 |
|------------|---------------------------|---|-----|--|---|
|            |                           | y to daphnia and other<br>invertebrates                 | :   | EC50 (Daphnia m<br>Exposure time: 48   | nagna (Water flea)): 1,4 mg/l<br>3 h                              |
|            | Toxicity                  | / to algae  | :   | EC50 (Anabaena flos-aquae (cyanobacterium)): 0,068 mg/l<br>Exposure time: 72 h |   |
|            |                           |   |     | NOEC (Anabaena<br>Exposure time: 72  | a flos-aquae (cyanobacterium)): 0,025 mg/l<br>2 h                 |
|            | M-Fact<br>icity)          | or (Acute aquatic tox-                                  | :   | 10   |   |
|            | Toxicity<br>icity)        | y to fish (Chronic tox-                                 | :   |  | 9 d<br>/nchus mykiss (rainbow trout)<br>est Guideline 210         |
|            |                           | y to daphnia and other<br>invertebrates (Chron-<br>ity) | :   | NOEC: 0,06 mg/l<br>Exposure time: 2<br>Species: Daphnia                        | 1 d<br>magna (Water flea)   |
| 12.2       | 2 Persis                  | tence and degradabil                                    | ity |  |   |
|            | Components:               |   |     |  |   |
|            | D-Glucopyranose, Oligomer |   | ic, | -  |   |
|            | Biodeg                    | radability  | :   | Result: Readily bi<br>Biodegradation:<br>Exposure time: 28<br>Method: OECD T   | 100 %   |
|            | (R)-p-n                   | nentha-1,8-diene:                                       |     |  |   |
|            | Biodeg                    | radability  | :   | Result: Readily bi<br>Biodegradation:<br>Exposure time: 28<br>Remarks: Based   | 80 %  |
|            | Glucop                    | oyranose, oligomeric                                    | C10 | )-16 glycosides:   |   |
|            | Biodeg                    | radability  | :   | Result: Readily bi<br>Biodegradation: a<br>Exposure time: 28<br>Method: OECD T | 88 %  |
|            | 2-Bron                    | no-2-nitro- 1,3-propan                                  | edi | ol:  |   |
|            | Biodeg                    | radability  | :   | Result: Readily bi<br>Biodegradation:<br>Exposure time: 28<br>Method: OECD T   | 70 - 80 %   |



| Version | Revision Date: | SDS Number:  | Date of last issue: 28.10.2016  |
|---------|----------------|--------------|---------------------------------|
| 7.2     | 16.03.2017     | 802836-00005 | Date of first issue: 11.06.2010 |

#### 12.3 Bioaccumulative potential

#### Components:

#### D-Glucopyranose, Oligomeric, C8-10 Glycosides:

Partition coefficient: n- : log Pow: 1,72 octanol/water

# (R)-p-mentha-1,8-diene:

Partition coefficient: n- : log Pow: 4,38 octanol/water

#### 2-Bromo-2-nitro- 1,3-propanediol:

Partition coefficient: n- : log Pow: 0,22 octanol/water

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

Not relevant

#### 12.6 Other adverse effects

No data available

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

| Product                | : | Dispose of in accordance with local regulations.<br>According to the European Waste Catalogue, Waste Codes<br>are not product specific, but application specific.<br>Waste codes should be assigned by the user, preferably in<br>discussion with the waste disposal authorities. |
|------------------------|---|---|
| Contaminated packaging | : | Empty containers should be taken to an approved waste han-<br>dling site for recycling or disposal.<br>If not otherwise specified: Dispose of as unused product.  |
| Waste Code             | : | The following Waste Codes are only suggestions:   |
|                        |   | used product<br>200000, MUNICIPAL WASTES (HOUSEHOLD WASTE AND<br>SIMILAR COMMERCIAL, INDUSTRIAL AND<br>INSTITUTIONAL WASTES) INCLUDING SEPARATELY<br>COLLECTED FRACTIONS  |
|                        |   | unused product<br>200000, MUNICIPAL WASTES (HOUSEHOLD WASTE AND<br>SIMILAR COMMERCIAL, INDUSTRIAL AND<br>INSTITUTIONAL WASTES) INCLUDING SEPARATELY   |



VersionRevision Date:SDS Number:Date of last issue: 28.10.20167.216.03.2017802836-00005Date of first issue: 11.06.2010

### COLLECTED FRACTIONS

uncleaned packagings 150106, mixed packaging

Acc. Packaging Ordinance properly emptied packaging: Properly emptied, non-contaminated packaging of nonhazardous products can be supplied to a system for the collection of sales packaging.

# **SECTION 14: Transport information**

#### 14.1 UN number

Not regulated as a dangerous good

#### 14.2 UN proper shipping name

Not regulated as a dangerous good

#### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

#### 14.4 Packing group

Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Not applicable

Remarks

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

: Not applicable for product as supplied.

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

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

| REACH - Restrictions on the manufacture, placing on<br>the market and use of certain dangerous substances,<br>preparations and articles (Annex XVII) | : | Not applicable |
|--|---|----------------|
| REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).  | : | Not applicable |
| Regulation (EC) No 1005/2009 on substances that deplete the ozone layer  | : | Not applicable |
| Regulation (EC) No 850/2004 on persistent organic pol-<br>lutants  | : | Not applicable |
| Regulation (EC) No 649/2012 of the European Parlia-<br>ment and the Council concerning the export and import   | : | Not applicable |



| Version Revision Date | : SDS Number: | Date of last issue: 28.10.2016  |
|-----------------------|---------------|---------------------------------|
| 7.2 16.03.2017        | 802836-00005  | Date of first issue: 11.06.2010 |

of dangerous chemicals

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. Not applicable

| Water contaminating class<br>(Germany) | : | WGK 1 slightly water endangering<br>Classification according VwVwS, Annex 4.  |
|--|---|---|
| Volatile organic compounds             | : | Directive 2010/75/EU of 24 November 2010 on industrial<br>emissions (integrated pollution prevention and control)<br>Volatile organic compounds (VOC) content: 1,80 %, 17 g/l<br>Remarks: VOC content excluding water |

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

# **SECTION 16: Other information**

#### Full text of H-Statements

| H226  | :  | Flammable liquid and vapour.  |
|---|--|---|
| H301  | :  | Toxic if swallowed.   |
| H304  | :  | May be fatal if swallowed and enters airways.   |
| H312  | :  | Harmful in contact with skin.   |
| H315  | :  | Causes skin irritation.   |
| H317  | :  | May cause an allergic skin reaction.  |
| H318  | :  | Causes serious eye damage.  |
| H331  | :  | Toxic if inhaled.   |
| H335  | :  | May cause respiratory irritation.   |
| H400  | :  | Very toxic to aquatic life.   |
| H410  | :  | Very toxic to aquatic life with long lasting effects.   |
| H411  | :  | Toxic to aquatic life with long lasting effects.  |
|   |  |   |
| Full text of other abbreviation   | ns   |   |
| Full text of other abbreviation Acute Tox.  | ons<br>:   | Acute toxicity  |
|   | ons<br>:<br>:  |   |
| Acute Tox.  | ons<br>:<br>:<br>:   | Acute toxicity<br>Acute aquatic toxicity<br>Chronic aquatic toxicity  |
| Acute Tox.<br>Aquatic Acute   | ons<br>:<br>:<br>:   | Acute aquatic toxicity  |
| Acute Tox.<br>Aquatic Acute<br>Aquatic Chronic  | ons<br>:<br>:<br>:<br>:  | Acute aquatic toxicity<br>Chronic aquatic toxicity  |
| Acute Tox.<br>Aquatic Acute<br>Aquatic Chronic<br>Asp. Tox.   | ons<br>:<br>:<br>:<br>:<br>:   | Acute aquatic toxicity<br>Chronic aquatic toxicity<br>Aspiration hazard   |
| Acute Tox.<br>Aquatic Acute<br>Aquatic Chronic<br>Asp. Tox.<br>Eye Dam.   | ons<br>:<br>:<br>:<br>:<br>:   | Acute aquatic toxicity<br>Chronic aquatic toxicity<br>Aspiration hazard<br>Serious eye damage   |
| Acute Tox.<br>Aquatic Acute<br>Aquatic Chronic<br>Asp. Tox.<br>Eye Dam.<br>Flam. Liq.   | ons<br>:<br>:<br>:<br>:<br>:<br>:  | Acute aquatic toxicity<br>Chronic aquatic toxicity<br>Aspiration hazard<br>Serious eye damage<br>Flammable liquids  |
| Acute Tox.<br>Aquatic Acute<br>Aquatic Chronic<br>Asp. Tox.<br>Eye Dam.<br>Flam. Liq.<br>Skin Irrit.                          | ons<br>:<br>:<br>:<br>:<br>:<br>:<br>:   | Acute aquatic toxicity<br>Chronic aquatic toxicity<br>Aspiration hazard<br>Serious eye damage<br>Flammable liquids<br>Skin irritation   |
| Acute Tox.<br>Aquatic Acute<br>Aquatic Chronic<br>Asp. Tox.<br>Eye Dam.<br>Flam. Liq.<br>Skin Irrit.<br>Skin Sens.            | ons<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>: | Acute aquatic toxicity<br>Chronic aquatic toxicity<br>Aspiration hazard<br>Serious eye damage<br>Flammable liquids<br>Skin irritation<br>Skin sensitisation<br>Specific target organ toxicity - single exposure |
| Acute Tox.<br>Aquatic Acute<br>Aquatic Chronic<br>Asp. Tox.<br>Eye Dam.<br>Flam. Liq.<br>Skin Irrit.<br>Skin Sens.<br>STOT SE | ons  | Acute aquatic toxicity<br>Chronic aquatic toxicity<br>Aspiration hazard<br>Serious eye damage<br>Flammable liquids<br>Skin irritation<br>Skin sensitisation   |



| Version | Revision Date: | SDS Number:  | Date of last issue: 28.10.2016  |
|---------|----------------|--------------|---------------------------------|
| 7.2     | 16.03.2017     | 802836-00005 | Date of first issue: 11.06.2010 |

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China: IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### Further information

| Sources of key data used to :  | Internal technical data, data from raw material SDSs, OECD |  |
|--------------------------------|--|--|
| compile the Safety Data        | eChem Portal search results and European Chemicals Agen    |  |
| Sheet                          | cy, http://echa.europa.eu/                                 |  |
| Classification of the mixture: | Classification procedure:                                  |  |

|      | •                  |
|------|--------------------|
| H318 | Calculation method |
| H317 | Calculation method |
| H412 | Calculation method |
|      | H317               |

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS mate-



| Version | Revision Date: | SDS Number:  | Date of last issue: 28.10.2016  |
|---------|----------------|--------------|---------------------------------|
| 7.2     | 16.03.2017     | 802836-00005 | Date of first issue: 11.06.2010 |

rial is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

DE / EN