

Page 1 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 11.12.2017 / 0021 Replacing version dated / version: 22.06.2017 / 0020 Valid from: 11.12.2017 PDF print date: 24.01.2018 Windshield super-concentrated cleaner 20 ml Art.: 22033

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

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

1.1 Product identifier

Windshield super-concentrated cleaner 20 ml Art.: 22033

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

Window cleaner Sector of use [SU]:

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SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 - Consumer uses: Private households (=general public = consumers)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC35 - Washing and cleaning products

Process category [PROC]:

PROC 7 - Industrial spraying

PROC 8a - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC 9 - Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC11 - Non industrial spraying

Article Categories [AC]: AC99 - Not required.

Environmental Release Category [ERC]:

ERC 4 - Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC 7 - Use of functional fluid at industrial site

ERC 8a - Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC 8d - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

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

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

1.4 Emergency telephone number

Emergency information services / official advisory body:

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) 1272/2008 (CLP) Hazard class Hazard category Hazard statement Skin Irrit. 2

H315-Causes skin irritation.



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Eye Dam.

H318-Causes serious eye damage.

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



H315-Causes skin irritation. 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 protective gloves and 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.

Alcohols, C12-14, ethoxylated, sulfates, sodium salts Sulfonic acids, C14-17-sec-alkane, sodium salts Diisooctyl sulfosuccinate, sodium salt

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a. 3.2 Mixture

| Alcohols, C12-14, ethoxylated, sulfates, sodium salts | Substance with specific conc. limit(s) acc. to REACh- registration |
|---|---|
| Registration number (REACH) | 01-2119488639-16-XXXX |
| Index | |
| EINECS, ELINCS, NLP | 500-234-8 (NLP) |
| CAS | 68891-38-3 |
| content % | 10-20 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Skin Irrit. 2, H315 |
| | Eye Dam. 1, H318 |
| | Aquatic Chronic 3, H412 |
| Sulfonic acids, C14-17-sec-alkane, sodium salts | Substance with specific conc. limit(s) acc. to REACh- |
| | registration |
| Registration number (REACH) | 01-2119489924-20-XXXX |
| Index | |
| EINECS, ELINCS, NLP | 307-055-2 |
| CAS | 97489-15-1 |



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| |

| content % | 1-10 |
|---|-------------------------|
| Classification according to Regulation (EC) 1272/2008 (CLP) | Acute Tox. 4, H302 |
| | Skin Irrit. 2, H315 |
| | Eye Dam. 1, H318 |
| | Aquatic Chronic 3, H412 |
| | |

| Diisooctyl sulfosuccinate, sodium salt | |
|---|---------------------|
| Registration number (REACH) | |
| Index | |
| EINECS, ELINCS, NLP | 209-406-4 |
| CAS | 577-11-7 |
| content % | 1-5 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Flam. Liq. 3, H226 |
| | Skin Irrit. 2, H315 |
| | Eye Dam. 1, H318 |

| Bronopol (INN) | |
|---|------------------------------|
| Registration number (REACH) | |
| Index | 603-085-00-8 |
| EINECS, ELINCS, NLP | 200-143-0 |
| CAS | 52-51-7 |
| content % | 0,01-<0,1 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Acute Tox. 4, H312 |
| | Acute Tox. 4, H302 |
| | STOT SE 3, H335 |
| | Skin Irrit. 2, H315 |
| | Eye Dam. 1, H318 |
| | Aquatic Acute 1, H400 (M=10) |

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.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

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Remove person from danger area.

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

Skin contact

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

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.

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.

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



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SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

The product does not burn. Adapt to the nature and extent of fire. **Unsuitable extinguishing media**

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

None known

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. According to size of fire Full protection, if necessary. Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system.

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, sawdust) and dispose of according to Section 13. Diluting with water is possible.

Flush residue using copious water.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

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



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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 at room temperature. Protect from frost.

7.3 Specific end use(s)

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No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

| Area of application | Exposure route / Environmental | Effect on health | Descriptor | Value | Unit | Note |
|---------------------|--|-----------------------------|------------|-------|---------------------|------|
| | compartment | | | | | |
| | Environment - freshwater | | PNEC | 0,24 | mg/l | |
| | Environment - periodic release | | PNEC | 0,13 | mg/l | |
| | Environment - marine | | PNEC | 0,024 | mg/l | |
| | Environment - sediment, freshwater | | PNEC | 5,45 | mg/kg dry weight | |
| | Environment - sediment, marine | | PNEC | 0,545 | mg/kg dry weight | |
| | Environment - sewage treatment plant | | PNEC | 10000 | mg/l | |
| | Environment - soil | | PNEC | 0,946 | mg/kg dry weight | |
| | Environment - sporadic (intermittent) release | | PNEC | 0,071 | mg/l | |
| | Environment - sediment, freshwater | Short term | PNEC | 0,917 | mg/kg | |
| | Environment - sediment, marine | Short term | PNEC | 0,092 | mg/kg | |
| | Environment - soil | Short term | PNEC | 7,5 | mg/kg | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 15 | mg/kg bw/day | |
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 1650 | mg/kg bw/day | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 52 | mg/m3 | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 2750 | mg/kg bw/day | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 175 | mg/m3 | |

| rea 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, sporadic (intermittent) release | | PNEC | 0,06 | mg/l | |
| | Environment - sediment, freshwater | | PNEC | 9,4 | mg/kg dw | |



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| | Environment - sediment, marine | | PNEC | 0,94 | mg/kg dw | |
|---------------------|---|-----------------------------|------|------|------------|--|
| | Environment - soil | | PNEC | 9,4 | mg/kg dw | |
| | Environment - sewage treatment plant | | PNEC | 600 | mg/l | |
| | Environment - oral (animal feed) | | PNEC | 53,3 | mg/kg feed | |
| | Environment - periodic 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 | |

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.

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). If applicable Face protection (EN 166)

Skin protection - Hand protection: Chemical resistant protective gloves (EN 374). Recommended Safety gloves made of butyl (EN 374) Minimum layer thickness in mm: >= 0,5 Permeation time (penetration time) in minutes: >= 480 The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time.

The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended.

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

Respiratory protection: Normally not necessary.

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.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties Physical state: Liquid

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

9.2 Other information

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

Green, Yellow Fruity Not determined 7,7 (20°C, DIN 19268) Not determined ~100 °C Not determined Not determined n.a. Product is not explosive. Not determined 23 hPa (20°C) Not determined 1,033 g/cm3 (20°C, DIN 51757) Not determined Not determined Mixable Not determined No Not determined Not determined Product is not explosive. No

Not determined Not determined Not determined Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested. **10.2 Chemical stability** Stable with proper storage and handling. **10.3 Possibility of hazardous reactions** No dangerous reactions are known. **10.4 Conditions to avoid** None known **10.5 Incompatible materials** Avoid contact with strong acids. **10.6 Hazardous decomposition products**



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No decomposition when used as directed.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification). Windshield super-concentrated cleaner 20 ml

| 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: | | | | | | n.d.a. |
| Acute toxicity, by inhalation: | | | | | | n.d.a. |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |
| Respiratory or skin | | | | | | 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. |

| Alcohols, C12-14, ethoxylated, | | | | | | |
|----------------------------------|---------------|-----------|-------|------------|------------------------|-------------------|
| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50 | 4100 | mg/kg | Rat | OECD 401 (Acute Oral | |
| | | | | | Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >2000 | mg/kg | Rat | OECD 402 (Acute | |
| | | | | | Dermal Toxicity) | |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute | Irritant |
| | | | | | Dermal | |
| | | | | | Irritation/Corrosion) | |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye | Risk of serious |
| | | | | | Irritation/Corrosion) | damage to eyes. |
| Serious eye damage/irritation: | | >=10 | % | | | Eye Dam. 1 |
| Serious eye damage/irritation: | | >=5 | % | | | Eye Irrit. 2 |
| Respiratory or skin | | | | Guinea pig | OECD 406 (Skin | Not sensitizising |
| sensitisation: | | | | | Sensitisation) | |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial | Negative |
| 0 7 | | | | | Reverse Mutation Test) | |
| Reproductive toxicity: | NOAEL | >1000 | mg/kg | Rat | OECD 414 (Prenatal | Negative, |
| | | | | | Developmental Toxicity | References |
| | | | | | Study) | |
| Reproductive toxicity: | NOAEL | >300 | mg/kg | Rat | OECD 416 (Two- | Negative, |
| | | | | | generation | References |
| | | | | | Reproduction Toxicity | |
| | | | | | Study) | |
| Symptoms: | | | | | | mucous |
| | | | | | | membrane |
| | | | | | | irritation |
| Specific target organ toxicity - | NOAEL | >225 | mg/kg | Rat | OECD 408 (Repeated | Target organ(s): |
| repeated exposure (STOT-RE), | - | - | | | Dose 90-Day Oral | liver, References |
| oral: | | | | | Toxicity Study in | |
| | | | | | Rodents) | |
| | | | | | ricacinoj | |
| Sulfonic acids, C14-17-sec-alka | ane. sodium s | alts | | | | |
| 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) | 1 |



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| Acute toxicity, by dermal route: | LD50 | >2000 | mg/kg | Mouse | | Analogous |
|----------------------------------|------|-------|-------|------------|-----------------------|-------------------|
| | | | | | | conclusion |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute | Skin Irrit. 2 |
| | | | | | Dermal | |
| | | | | | Irritation/Corrosion) | |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye | Eye Dam. 1 |
| | | | | | Irritation/Corrosion) | |
| Respiratory or skin | | | | Guinea pig | OECD 406 (Skin | No (skin contact) |
| sensitisation: | | | | | Sensitisation) | |
| Germ cell mutagenicity: | | | | | | No indications of |
| | | | | | | such an effect. |
| Carcinogenicity: | | | | Rat | | No indications of |
| | | | | | | such an effect. |
| Reproductive toxicity: | | 200 | mg/kg | Rat | | No indications of |
| | | | | | | such an effect. |
| Aspiration hazard: | | | | | | No |

| Diisooctyl sulfosuccinate, sodi | um salt | | | | | |
|---|----------|-------|---------|----------|--|---|
| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50 | >2000 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >2000 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | |
| Acute toxicity, by inhalation: | LC50 | >20 | mg/l/4h | | | |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Irritant |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Eye Dam. 1 |
| Germ cell mutagenicity: | | | | | (Ames-Test) | Negative |
| Reproductive toxicity: | | | | Rat | | Negative |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | 750 | mg/kg | | | Negative |
| Symptoms: | | | | | | mucous membrane irritation, coughing, breathing difficulties |

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|--|----------|-------|-------|----------|--|--|
| Acute toxicity, by oral route: | LD50 | 305 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | data of a diluted aequous solution |
| Acute toxicity, by dermal route: | LD50 | 1600 | mg/kg | Rat | | · · |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Irritant |
| Serious eye damage/irritation: | | | | Rabbit | (Draize-Test) | Risk of serious damage to eyes. |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | May cause respiratory irritation. |
| Symptoms: | | | | | | eyes, reddened, drowsiness, coughing, mucous membrane irritation, nausea and vomiting. |

SECTION 12: Ecological information



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Possibly more information on environmental effects, see Section 2.1 (classification). Windshield super-concentrated cleaner 20 ml

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|----------|------|-------|------|----------|-------------|--|
| 12.1. Toxicity to fish: | | | | | | | n.d.a. |
| 12.1. Toxicity to daphnia: | | | | | | | n.d.a. |
| 12.1. Toxicity to algae: | | | | | | | n.d.a. |
| 12.2. Persistence and degradability: | | | | | | | The surfactant(s 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 of a detergent manufacturer. |
| 12.3. Bioaccumulative potential: | | | | | | | n.d.a. |
| 12.4. Mobility in soil: | | | | | | | n.d.a. |
| 12.5. Results of PBT and vPvB assessment | | | | | | | n.d.a. |
| 12.6. Other adverse effects: | | | | | | | n.d.a. |
| Other information: | AOX | | | | | | Does not contai any organically bound halogens which can contribute to the AOX value in waste water. |

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|----------------------------|-----------|------|-------|------|-------------------|--|-------|
| 2.1. Toxicity to fish: | LC50 | 96h | 7,1 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | 0,27 | mg/l | Daphnia magna | OECD 211 (Daphnia magna Reproduction Test) | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | 7,4 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |



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| 12.1. Toxicity to algae: | NOEC/NOEL | 96h | 0,95 | mg/l | | OECD 201 (Alga, Growth Inhibition | |
|----------------------------------|-----------|-----|------|------|-----------------------|--------------------------------------|-----------------------|
| | | | | | | Test) | |
| 12.1. Toxicity to algae: | EC50 | 72h | 27,7 | mg/l | | OECD 201 (Alga, Growth Inhibition | |
| | | | | | | Test) | |
| 12.2. Persistence and | | 28d | 95 | % | | OECD 301 E | |
| degradability: | | | | | | (Ready | |
| | | | | | | Biodegradability - | |
| | | | | | | Modified OECD | |
| 12.2. Persistence and | | 28d | >70 | % | | Screening Test) OECD 301 A | Deedily |
| degradability: | | 200 | >70 | 70 | | (Ready | Readily biodegradable |
| degradability. | | | | | | Biodegradability - | biouegradable |
| | | | | | | DOC Die-Away | |
| | | | | | | Test) | |
| 12.3. Bioaccumulative potential: | Kow | | 0,3 | | | | |
| 12.3. Bioaccumulative | Log Pow | | 0,3 | | | | Bioaccumulation |
| potential: | | | | | | | is unlikely |
| | | | | | | | (LogPow < 1). |
| 12.4. Mobility in soil: | Koc | | 191 | | | | calculated value |
| 12.5. Results of PBT | | | | | | | No PBT |
| and vPvB assessment | | | | | | | substance |
| Toxicity to bacteria: | EC50 | 16h | >10 | g/l | Pseudomonas putida | DIN 38412 T.8 | |

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|-----------|------|-------|------|----------------------------|--|--------------------------|
| 12.1. Toxicity to fish: | LC50 | 96h | 1 -10 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity | |
| 12.1. Toxicity to fish: | NOEC/NOEL | 28d | 0,85 | mg/l | Oncorhynchus mykiss | Test) OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study) | |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 22d | 0,36 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | 9,81 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to algae: | EC50 | 72h | >61 | mg/l | Scenedesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.2. Persistence and degradability: | | 28d | 96,2 | % | activated sludge | OECD 304 A (Inherent Biodegradability in Soil) | Readily biodegradable |
| 12.2. Persistence and degradability: | | 28d | 78 | % | | OECD 301 B (Ready Biodegradability - Co2 Evolution Test) | Readily biodegradable |
| 12.2. Persistence and degradability: | | 28d | 89 | % | activated sludge | OECD 301 E (Ready Biodegradability - Modified OECD Screening Test) | Readily biodegradable |



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| 12.3. Bioaccumulative potential: | | | | | | | Not accepted due to the log |
|----------------------------------|-----------|-----|-----|-------|-----------------------|---|-----------------------------|
| - | | | | | | | Pow - value. |
| 12.5. Results of PBT | | | | | | | No PBT |
| and vPvB assessment | | | | | | | substance, No |
| | | | | | | | vPvB substance |
| Toxicity to bacteria: | NOEC/NOEL | 16h | 600 | mg/l | Pseudomonas putida | DIN 38412 T.8 | |
| Other organisms: | NOEC/NOEL | 56d | 470 | mg/kg | Eisenia foetida | OECD 222 (Earthworm Reproduction Test (Eisenia fetida/Eisenia andrei)) | |

| Diisooctyl sulfosuccinate, sodium salt | | | | | | | |
|--|----------|------|-------|------|-------------------|--------------------|---------------|
| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| 12.1. Toxicity to fish: | LC50 | 96h | 49 | mg/l | Brachydanio rerio | 84/449/EEC C.1 | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | 10,3 | mg/l | Daphnia magna | 84/449/EEC C.2 | |
| 12.1. Toxicity to algae: | EC50 | 72h | 39,3 | mg/l | Scenedesmus | 84/449/EEC C.3 | |
| | | | | | subspicatus | | |
| 12.2. Persistence and | | 28d | 91,2 | % | | OECD 310 | Readily |
| degradability: | | | | | | (Ready | biodegradable |
| | | | | | | Biodegradability - | |
| | | | | | | CO2 in sealed | |
| | | | | | | vessels | |
| | | | | | | (Headspace Test)) | |
| Toxicity to bacteria: | | 16h | 164 | mg/l | Pseudomonas | DIN 38412 T.8 | |
| | | | | | putida | | |

| Bronopol (INN) | | | | | | | |
|--------------------------------------|----------|------|-----------|------|-------------------------------------|-------------|--|
| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| 12.1. Toxicity to fish: | LC50 | 96h | 35,7 | mg/l | Lepomis macrochirus | | |
| 12.1. Toxicity to fish: | LC50 | 96h | 41,2 | mg/l | Oncorhynchus mykiss | | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | 1,4 | mg/l | Daphnia magna | | |
| 12.1. Toxicity to algae: | EC50 | 72h | 0,4 - 2,8 | mg/l | Pseudokirchneriell a subcapitata | | |
| 12.2. Persistence and degradability: | DOC | | 50 | % | | ISO 9888 | Biodegradable |
| 12.3. Bioaccumulative potential: | Log Pow | | 0,18 | | | | Not accepted due to the log Pow - value. |
| Toxicity to bacteria: | EC50 | 16h | >50 | mg/l | Pseudomonas putida | | |

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

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.



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E.g. dispose at suitable refuse site. For contaminated packing material

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

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

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

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

Directive 2010/75/EU (VOC): **REGULATION (EC) No 648/2004** 15 % or over but less than 30 %

anionic surfactants

perfumes 2-BROMO-2-NITROPROPANE-1,3-DIOL BENZISOTHIAZOLINONE

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

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

| Classification in accordance with regulation (EC) No. 1272/2008 (CLP) | Evaluation method used |
|--|--|
| Skin Irrit. 2, H315 | Classification according to calculation procedure. |
| 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 (specified in Section 2 and 3). H226 Flammable liquid and vapour. H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects. Skin Irrit. — Skin irritation

Eye Dam. — Serious eye damage Aquatic Chronic — Hazardous to the aquatic environment - chronic Acute Tox. — Acute toxicity - oral Flam. Liq. — Flammable liquid Acute Tox. — Acute toxicity - dermal STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation Aquatic Acute — Hazardous to the aquatic environment - acute

Any abbreviations and acronyms used in this document:

AC Article Categories acc., acc. to according, according to ACGIH American Conference of Governmental Industrial Hygienists ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road) AOEL Acceptable Operator Exposure Level Adsorbable organic halogen compounds AOX approx. approximately Art., Art. no. Article number Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP) ATE 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** BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation) BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol) BMGV Biological monitoring guidance value (EH40, UK) BOD Biochemical oxygen demand BSEF Bromine Science and Environmental Forum body weight bw CAS **Chemical Abstracts Service** Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids CEC CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques CIPAC Collaborative International Pesticides Analytical Council CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) CMR carcinogenic, mutagenic, reproductive toxic COD Chemical oxygen demand CTFA Cosmetic, Toiletry, and Fragrance Association



ആ Page 15 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 11.12.2017 / 0021 Replacing version dated / version: 22.06.2017 / 0020 Valid from: 11.12.2017 PDF print date: 24.01.2018 Windshield super-concentrated cleaner 20 ml Art.: 22033 DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon DT50 Dwell Time - 50% reduction of start concentration DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes) dw dry weight e.g. for example (abbreviation of Latin 'exempli gratia'), for instance European Community EC ECHA European Chemicals Agency EEA European Economic Area EEC European Economic Community European Inventory of Existing Commercial Chemical Substances EINECS ELINCS European List of Notified Chemical Substances ΕN **European Norms** EPA United States Environmental Protection Agency (United States of America) ERC **Environmental Release Categories** ES Exposure scenario et cetera etc. EU **European Union** EWC European Waste Catalogue Fax. Fax number general aen. Globally Harmonized System of Classification and Labelling of Chemicals GHS GWP Global warming potential HFT-CAM Hen's Egg Test - Chorionallantoic Membrane HGWP Halocarbon Global Warming Potential International Agency for Research on Cancer IARC International Air Transport Association IATA IBC Intermediate Bulk Container IBC (Code) International Bulk Chemical (Code) Inhibitory concentration IC IMDG-code International Maritime Code for Dangerous Goods including, inclusive incl. IUCLID International Uniform ChemicaL Information Database lethal concentration LC LC50 lethal concentration 50 percent kill lowest published lethal concentration LCLo LD Lethal Dose of a chemical Lethal Dose, 50% kill LD50 LDLo Lethal Dose Low LOAEL Lowest Observed Adverse Effect Level LOEC Lowest Observed Effect Concentration LOEL Lowest Observed Effect Level LQ Limited Quantities MARPOL International Convention for the Prevention of Marine Pollution from Ships not applicable n.a. not available n.av. not checked n.c. n.d.a. no data available NIOSH National Institute of Occupational Safety and Health (United States of America) NOAECNo Observed Adverse Effective Concentration NOAEL No Observed Adverse Effect Level NOEC No Observed Effect Concentration NOEL No Observed Effect Level ODP **Ozone Depletion Potential** OECD Organisation for Economic Co-operation and Development organic org. PAH polycyclic aromatic hydrocarbon persistent, bioaccumulative and toxic PBT PC Chemical product category PΕ Polyethylene PNEC Predicted No Effect Concentration POCP Photochemical ozone creation potential



Page 16 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 11.12.2017 / 0021 Replacing version dated / version: 22.06.2017 / 0020 Valid from: 11.12.2017 PDF print date: 24.01.2018 Windshield super-concentrated cleaner 20 ml Art.: 22033 parts per million ppm PROC Process category PTFE Polytetrafluorethylene REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals) 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List REACH-IT List-No. Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT. Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International RID Carriage of Dangerous Goods by Rail) SADT Self-Accelerating Decomposition Temperature SAR Structure Activity Relationship SU Sector of use SVHC Substances of Very High Concern Telephone Tel. ThOD Theoretical oxygen demand Total organic carbon TOC TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances) UN RTDG United Nations Recommendations on the Transport of Dangerous Goods VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria)) VOC Volatile organic compounds vPvB very persistent and very bioaccumulative WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK). WHO World Health Organization wet weight wwt The statements made here should describe the product with regard to the necessary safety precautions - they are

not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

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These statements were made by:

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