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

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

1.1 Product identifier

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Bremsen- und Teilereiniger AIII

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

Cleaner Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

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

GB

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

1.4 Emergency telephone number Emergency information services / official advisory body:

Landspitali- The National University Hospital of Iceland, tel. +354 543 2222 or 112 (valid only for Iceland) **Telephone number of the company in case of emergencies:** +49 (0) 700 / 24 112 112 (LMR) +1 872 5888271 (LMR)

SECTION 2: Hazards identification

| 2.1 Classification of the substance or mixture Classification according to Regulation (EC) 1272/2008 (CLP) | | | | | | | |
|---|-----------------|--|--|--|--|--|--|
| Hazard class | Hazard category | Hazard statement | | | | | |
| Asp. Tox. | 1 | H304-May be fatal if swallowed and enters airways. | | | | | |
| Aerosol | 1 | H222-Extremely flammable aerosol. | | | | | |
| Aerosol | 1 | H229-Pressurised container: May burst if heated. | | | | | |

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



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Danger

H222-Extremely flammable aerosol. H229-Pressurised container: May burst if heated.

P102-Keep out of reach of children.

P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211-Do not spray on an open flame or other ignition source. P251-Do not pierce or burn, even after use. P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

EUH066-Repeated exposure may cause skin dryness or cracking.

Without adequate ventilation, formation of explosive mixtures may be possible. Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

2.3 Other hazards

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

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0.1 %).

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

SECTION 3: Composition/information on ingredients

Aerosol

3.1 Substances

n.a. **3.2 Mixtures**

| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics | |
|--|-----------------------|
| Registration number (REACH) | 01-2119457273-39-XXXX |
| Index | |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 918-481-9 |
| CAS | (64742-48-9) |
| content % | 75-<100 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | EUH066 |
| | Asp. Tox. 1, H304 |

| Carbon dioxide | Substance for which an EU exposure limit value applies. |
|--|---|
| Registration number (REACH) | |
| Index | |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 204-696-9 |
| CAS | 124-38-9 |
| content % | 3-<5 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | |

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.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here.



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Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here. The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

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. Seek medical help if necessary.

Ingestion

Typically no exposure pathway.

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately. In case of vomiting, keep head low so that the stomach content does not reach the lungs.

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. Headaches Dizziness Fatigue Drying of the skin. Dermatitis (skin inflammation) Nausea Vomiting Danger of aspiration. oedema of the lungs Chemical pneumonitis (condition similar to pneumonia) **4.3 Indication of any immediate medical attention and special treatment needed**

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

CO2 Extinction powder Water jet spray Alcohol resistant foam **Unsuitable extinguishing media** High volume water jet **5.2 Special hazards arising from the substance or mixture** In case of fire the following can develop: Oxides of carbon Toxic gases Possible build up of explosive/highly flammable vapour/air mixture. Danger of bursting (explosion) when heated **5.3 Advice for firefighters** For personal protective equipment see Section 8.



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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

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

Avoid dust formation with solid or powder products.

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

Avoid contact with eyes or skin.

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If applicable, caution - risk of slipping.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

6.2 Environmental precautions

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

Prevent surface and ground-water infiltration, as well as ground penetration. If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Without adequate ventilation, formation of explosive mixtures may be possible. Active substance:

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

6.4 Reference to other sections

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

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

7.1.1 General recommendations Ensure good ventilation.

Avoid inhalation of the vapours. Avoid inhalation of the vapours. Avoid contact with eyes or skin. Keep away from sources of ignition - Do not smoke. Take measures against electrostatic charging, if appropriate. Do not use on hot surfaces. Eating, drinking, smoking, as well as food-storage, is prohibited in work-room. Observe directions on label and instructions for use. Use working methods according to operating instructions. **7.1.2 Notes on general hygiene measures at the workplace** General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and at end of work. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothing and protective equipment before entering areas in which food is consumed. **7.2 Conditions for safe storage, including any incompatibilities**

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Observe special regulations for aerosols!

Do not store with flammable or self-igniting materials.

Keep protected from direct sunlight and temperatures over 50°C.

Store in a well ventilated place.

Store cool.

Observe special storage conditions.



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7.3 Specific end use(s)

No information available at present.

Observe the instructions for good working practice and the recommendations for risk assessment.

Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries, depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3

| Chemical Name | Hydrocarbons, C10-C13, n | alkanes, isoalkan | es, cyclics, <2% aromatics | | | | | |
|------------------------------|---------------------------------|-------------------|----------------------------|-------------------------|--|--|--|--|
| WEL-TWA: 800 mg/m3 | WEL-S | STEL: | | | | | | |
| Monitoring procedures: | - Draeger - | Hydrocarbons 0, | 1%/c (81 03 571) | | | | | |
| | - Draeger - | Hydrocarbons 2/ | a (81 03 581) | | | | | |
| | - Compur - KITA-187 S (551 174) | | | | | | | |
| BMGV: | | | Other information: (| DEL acc. to RCP-method, | | | | |
| | | | paragraphs 84-87, EF | 140) | | | | |
| Chemical Name | Carbon dioxide | | | | | | | |
| WEL-TWA: 5000 ppm (9150 mg/m | n3) (WEL-TWA), WEL-S | STEL: 15000 pp | m (27400 mg/m3) (WEL-STEL) | | | | | |

| WEL-TWA: 5000 ppm (9150 mg/m3) (WEL-TWA), | WEL-STEL: 15000 ppm (27400 mg/m3) (WEL-STEL) |
|---|--|
| 5000 ppm (9000 mg/m3) (EU) | |
| Monitoring procedures: - | Draeger - Carbon Dioxide 0,1%/a (CH 23 501) |
| - | Draeger - Carbon Dioxide 0,5%/a (CH 31 401) |
| - | Draeger - Carbon Dioxide 1%/a (CH 25 101) |
| - | Draeger - Carbon Dioxide 100/a (81 01 811) |
| - | Draeger - Carbon Dioxide 5%/A (CH 20 301) |
| - | Compur - KITA-126 B (549 475) |
| - | Compur - KITA-126 SA (549 467) |
| - | Compur - KITA-126 SB (548 816) |
| - | Compur - KITA-126 SF (549 491) |
| - | Compur - KITA-126 SG (550 210) |
| - | Compur - KITA-126 SH (549 509) |
| - | Compur - KITA-126 UH (549 517) |
| - | NIOSH 6603 (Carbon dioxide) - 1994 |
| - | OSHA ID-172 (Carbon dioxide in workplace atmospheres) - 1990 |
| BMGV: | Other information: |

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

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

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU: (8) = Inhalable fraction (2004/37/CE, 2017/164/EU). (9) = Respirable fraction (2004/37/CE, 2017/164/EU). (11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). | | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit - 15-minute reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).



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(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU: (8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |

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

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

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

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

(13) = The substance can cause sensitisation of the skin and of the respiratory tract (2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE).

8.2 Exposure controls 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

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EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection: With danger of contact with eyes. Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Chemical resistant protective gloves (EN ISO 374). Recommended Protective nitrile gloves (EN ISO 374). Minimum layer thickness in mm: 0,45 Permeation time (penetration time) in minutes: 480 Protective hand cream recommended.

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time.

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

Respiratory protection: Normally not necessary. If OES or MEL is exceeded. Filter A2 P2 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

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.



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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: Colour: Odour: Melting point/freezing point: Boiling point or initial boiling point and boiling range: Flammability: Lower explosion limit: Upper explosion limit: Flash point: Auto-ignition temperature: Decomposition temperature: pH: Kinematic viscosity: Solubility: Partition coefficient n-octanol/water (log value): Vapour pressure: Density and/or relative density: Density and/or relative density: Relative vapour density: Particle characteristics:

Aerosol. Active substance: liquid. Colourless Slightly There is no information available on this parameter. 160 °C Does not apply to aerosols. 0,5 Vol-% 7 Vol-% >61 °C Does not apply to aerosols. There is no information available on this parameter. Not determined 1,3 mm2/s (40°C) Soluble Does not apply to mixtures. There is no information available on this parameter. 0,79 g/ml (Active substance) 0,79 g/cm3 (20°C, DIN 51757) Does not apply to aerosols. Does not apply to aerosols.

9.2 Other information

No information available at present.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested. **10.2 Chemical stability** Stable with proper storage and handling. **10.3 Possibility of hazardous reactions** No dangerous reactions are known.

10.4 Conditions to avoid

Heating, open flame, ignition sources Pressure increase will result in danger of bursting.

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

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

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

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|----------------------------------|----------|-------|------|----------|-------------|--------|
| Acute toxicity, by oral route: | | | | | | n.d.a. |
| Acute toxicity, by dermal route: | | | | | | n.d.a. |
| Acute toxicity, by inhalation: | | | | | | n.d.a. |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |



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|--|-----------|--------------------------|----------|------------------------------------|---|--|
| Respiratory or skin sensitisation: | | | | | | n.d.a. |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |
| Specific target organ toxicity - single exposure (STOT-SE): Specific target organ toxicity - | | | | | | n.d.a. |
| repeated exposure (STOT-RE): Aspiration hazard: | | | | | | n.d.a. |
| Symptoms: | | | | | | n.d.a. |
| | | | | | | |
| Hydrocarbons, C10-C13, n-alka Toxicity / effect | Endpoint | es, cyclics, <2 Value | Unit | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | Notes |
| Acute toxicity, by dermal route: | LD50 | >2000 | mg/kg | Rat | OECD 402 (Acute Dermal Toxicity) | |
| Acute toxicity, by inhalation: | LC50 | >5 | mg/m3/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Vapours, Analogous conclusion |
| Acute toxicity, by inhalation: | LC50 | >4,951 | mg/m3/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Analogous conclusion, Maximum achievable concentration., Vapours |
| Skin corrosion/irritation: | | | | | | Repeated exposure may cause skin dryness or cracking., Product removes fat. |
| Skin corrosion/irritation: | | | | | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant, Analogous conclusion, Repeated exposure may cause skin dryness or cracking. |
| Serious eye damage/irritation: | | | | | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant |
| Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | No (skin contact) |
| Germ cell mutagenicity: Germ cell mutagenicity: | | | | Salmonella typhimurium Mouse | OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian | Negative Negative, |
| | | | | wouse | Erythrocyte Micronucleus Test) | Analogous conclusion |
| Carcinogenicity: | | | | | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Negative, Analogous conclusion |
| Reproductive toxicity: | | | | | OECD 421 (Reproduction/Developm ental Toxicity Screening Test) | Negative, Analogous conclusion |
| Reproductive toxicity: | NOAEC | >= 5220 | mg/m3 | Rat | OECD 414 (Prenatal Developmental Toxicity Study) | Negative, Analogous conclusioninhalat ion |

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| Specific target organ toxicity - | OECD 408 (Repeated | No indications of |
|----------------------------------|--------------------|--------------------|
| repeated exposure (STOT-RE): | Dose 90-Day Oral | such an effect. |
| repeated exposure (0101-ICE). | Toxicity Study in | Analogous |
| | | 0 |
| | Rodents) | conclusion |
| Aspiration hazard: | | Yes |
| Symptoms: | | unconsciousness |
| | | , headaches, |
| | | dizziness, |
| | | Dermatitis (skin |
| | | inflammation), |
| | | Reddening, |
| | | drying of the |
| | | skin., mucous |
| | | 1 ' |
| | | membrane |
| | | irritation, nausea |
| | | and vomiting., |
| | | diarrhoea, lower |
| | | abdominal pain |

| Carbon dioxide | | | | | | | |
|-------------------|----------|-------|------|----------|-------------|--|--|
| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes | |
| Symptoms: | | | | | | unconsciousness , blisters by skin- contact, vomiting, frostbite, annoyance, palpitations, itching, headaches, cramps, ear noises, dizziness | |

11.2. Information on other hazards

| Bremsen- und Teilereiniger AllI | | | | | | | |
|----------------------------------|----------|-------|------|----------|-------------|-----------------|--|
| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes | |
| Endocrine disrupting properties: | | | | | | Does not apply | |
| | | | | | | to mixtures. | |
| Other information: | | | | | | No other | |
| | | | | | | relevant | |
| | | | | | | information | |
| | | | | | | available on | |
| | | | | | | adverse effects | |
| | | | | | | on health. | |

| Carbon dioxide | | | | | | | |
|----------------------------------|----------|-------|------|----------|-------------|-------|--|
| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes | |
| Endocrine disrupting properties: | | | | | | No | |

SECTION 12: Ecological information

| Bremsen- und Teilereiniger Alli | | | | | | | |
|---------------------------------|----------|------|-------|------|----------|-------------|--------|
| 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 | | | | | | | n.d.a. |
| degradability: | | | | | | | |
| 12.3. Bioaccumulative | | | | | | | n.d.a. |
| potential: | | | | | | | |
| 12.4. Mobility in soil: | | | | | | | n.d.a. |



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| 12.5. Results of PBT | | | | | n.d.a. |
|------------------------------|-----|---|---|--|-----------------------------|
| and vPvB assessment | | | | | |
| 12.6. Endocrine | | | | | Does not apply |
| disrupting properties: | | | | | to mixtures. |
| 12.7. Other adverse effects: | | | | | No information available on |
| | | | | | other adverse |
| | | | | | effects on the |
| | | | | | environment. |
| Other information: | | | | | DOC-elimination |
| | | | | | degree(complexi |
| | | | | | ng organic |
| | | | | | substance)>= |
| | | | | | 80%/28d: n.a. |
| Other information: | AOX | 0 | % | | According to the |
| | | | | | recipe, contains |
| | | | | | no AOX. |

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|----------|------|---------|------|--------------------|--------------------|--------------------|
| 12.1. Toxicity to fish: | NOELR | 28d | 0,10 | mg/l | Oncorhynchus | QSAR | |
| | | | | | mykiss | | |
| 12.1. Toxicity to fish: | LC50 | 96h | >1000 | mg/l | Oncorhynchus | OECD 203 (Fish, | |
| - | | | | _ | mykiss | Acute Toxicity | |
| | | | | | | Test) | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | >1000 | mg/l | Daphnia magna | OECD 202 | |
| | | | | Ū | | (Daphnia sp. | |
| | | | | | | Acute | |
| | | | | | | Immobilisation | |
| | | | | | | Test) | |
| 12.1. Toxicity to daphnia: | NOELR | 21d | 0,18 | mg/l | Daphnia magna | QSAR | |
| 12.1. Toxicity to algae: | ErL50 | 72h | >1000 | mg/l | Pseudokirchneriell | OECD 201 (Alga, | |
| | | | | 5 | a subcapitata | Growth Inhibition | |
| | | | | | | Test) | |
| 12.1. Toxicity to algae: | NOELR | 72h | 1000 | mg/l | Pseudokirchneriell | OECD 201 (Alga, | |
| , | | | | 0 | a subcapitata | Growth Inhibition | |
| | | | | | | Test) | |
| 12.2. Persistence and | | 28d | 80 | % | | OEĆD 301 F | Readily |
| degradability: | | | | | | (Ready | biodegradable |
| , | | | | | | Biodegradability - | 5 5 |
| | | | | | | Manometric | |
| | | | | | | Respirometry Test) | |
| 12.3. Bioaccumulative | Log Pow | | 5,5-7,2 | | | | |
| potential: | | | - / - / | | | | |
| 12.4. Mobility in soil: | Log Koc | | >3 | | | | Product is |
| , | | | | | | | slightly volatile. |
| 12.5. Results of PBT | | | | | | | No PBT |
| and vPvB assessment | | | | | | | substance, No |
| | | | | | | | vPvB substance |
| 12.7. Other adverse | | | | | | | Product floats or |
| effects: | | | | | | | the water |
| | | | | | | | surface. |
| Water solubility: | | | ~10 | mg/l | | | Slight |

Carbon dioxide Organism Salmo gairdneri Toxicity / effect Endpoint Time Value Unit Test method Notes 12.1. Toxicity to fish: LC50 96h 35 mg/l No PBT 12.5. Results of PBT and vPvB assessment substance, No vPvB substance 12.7. Other adverse Greenhouse effects: effect 0,83 Other information: Log Kow



| -@ | | | | | | | |
|--|---|----------|--|--|--|--|--|
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| | | | | | | | |
| Global warming 1 | | | | | | | |
| potential (GWP): | | | | | | | |
| | | | | | | | |
| 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 | of this product. | | | | | | |
| Owing to the user's specific conditions for use and disposal, other was | e codes may be | | | | | | |
| allocated under certain circumstances. (2014/955/EU) | | | | | | | |
| 14 06 03 other solvents and solvent mixtures 16 05 04 gases in pressure containers (including halons) containing ha | zardous substances | | | | | | |
| 20 01 29 detergents containing hazardous substances | 2010003 30231011053 | | | | | | |
| Recommendation: | | | | | | | |
| Sewage disposal shall be discouraged. | | | | | | | |
| Pay attention to local and national official regulations. | | | | | | | |
| Take full aerosol cans to problem waste collection. | | | | | | | |
| Take emptied aerosol cans to valuable material collection. | | | | | | | |
| For contaminated packing material | | | | | | | |
| Pay attention to local and national official regulations. | | | | | | | |
| Recommendation: Do not perforate, cut up or weld uncleaned container. | | | | | | | |
| Recycling | | | | | | | |
| 15 01 04 metallic packaging | | | | | | | |
| | | | | | | | |
| SECTION 14: Transport information | | | | | | | |
| | | | | | | | |
| General statements | | | | | | | |
| Transport by road/by rail (ADR/RID) | | | | | | | |
| 14.1. UN number or ID number: | 1950 | | | | | | |
| 14.2. UN proper shipping name: | | • | | | | | |
| UN 1950 AEROSOLS | | <u> </u> | | | | | |
| 14.3. Transport hazard class(es): | 2.1 | | | | | | |
| 14.4. Packing group: 14.5. Environmental hazards: | - Not applicable | | | | | | |
| Tunnel restriction code: | D | | | | | | |
| Classification code: | 5F | | | | | | |
| LQ: | 1 L | | | | | | |
| Transport category: | Transport category: 2 | | | | | | |
| Transport by sea (IMDG-code) | | | | | | | |
| 14.1. UN number or ID number: | 1950 | | | | | | |
| 14.2. UN proper shipping name: | | | | | | | |
| UN 1950 AEROSOLS 14.3. Transport hazard class(es): | | <u> </u> | | | | | |
| 14.4. Packing group: | 21 | | | | | | |
| | 2.1 | • | | | | | |
| 14.5. Environmental hazards: | 2.1 - Not applicable | • | | | | | |
| | - Not applicable Not applicable | | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: | - Not applicable | | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: Transport by air (IATA) | - Not applicable Not applicable | | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: Transport by air (IATA) 14.1. UN number or ID number: | - Not applicable Not applicable | | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: Transport by air (IATA) 14.1. UN number or ID number: 14.2. UN proper shipping name: | - Not applicable Not applicable F-D, S-U | • | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: Transport by air (IATA) 14.1. UN number or ID number: 14.2. UN proper shipping name: UN 1950 Aerosols, flammable | - Not applicable Not applicable F-D, S-U 1950 | | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: Transport by air (IATA) 14.1. UN number or ID number: 14.2. UN proper shipping name: UN 1950 Aerosols, flammable 14.3. Transport hazard class(es): | - Not applicable Not applicable F-D, S-U | • | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: Transport by air (IATA) 14.1. UN number or ID number: 14.2. UN proper shipping name: UN 1950 Aerosols, flammable | - Not applicable Not applicable F-D, S-U 1950 2.1 - | • | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: Transport by air (IATA) 14.1. UN number or ID number: 14.2. UN proper shipping name: UN 1950 Aerosols, flammable 14.3. Transport hazard class(es): 14.4. Packing group: 14.5. Environmental hazards: | - Not applicable Not applicable F-D, S-U 1950 | • | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: Transport by air (IATA) 14.1. UN number or ID number: 14.2. UN proper shipping name: UN 1950 Aerosols, flammable 14.3. Transport hazard class(es): 14.4. Packing group: 14.5. Environmental hazards: 14.6. Special precautions for user | - Not applicable Not applicable F-D, S-U 1950 2.1 - | | | | | | |
| 14.5. Environmental hazards: Marine Pollutant: EmS: Transport by air (IATA) 14.1. UN number or ID number: 14.2. UN proper shipping name: UN 1950 Aerosols, flammable 14.3. Transport hazard class(es): 14.4. Packing group: 14.5. Environmental hazards: | - Not applicable Not applicable F-D, S-U 1950 2.1 - | | | | | | |



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Precautions must be taken to prevent damage.

14.7. Maritime transport in bulk according to IMO instruments

Freighted as packaged goods rather than in bulk, therefore not applicable. Minimum amount regulations have not been taken into account. Danger code and packing code on request. Comply with special provisions.

SECTION 15: Regulatory information

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

Observe restrictions:

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Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)! Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

| Hazard categories | Notes to Annex I | Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements | Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements |
|-------------------|------------------|---|---|
| P3b | 11.1, 11.2 | 5000 (netto) | 50000 (netto) |

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): **REGULATION (EC) No 648/2004** 30 % and more ~ 96 %

aliphatic hydrocarbons

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

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

2, 3, 4, 6, 8, 9, 11, 12, 13, 15

Employee training in handling dangerous goods is required. These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

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

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

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents. H304 May be fatal if swallowed and enters airways.

EUH066 Repeated exposure may cause skin dryness or cracking.

Asp. Tox. — Aspiration hazard Aerosol — Aerosols



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Key literature references and sources for data:

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

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

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

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

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

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

Any abbreviations and acronyms used in this document:

according, according to acc., acc. to ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate Bundesanstalt für Materialforschung und -prüfung (= Federal Institute for Materials Research and Testing, Germany) BAM BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF Bioconcentration factor BSEF The International Bromine Council CAS **Chemical Abstracts Service** CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon e.q. for example (abbreviation of Latin 'exempli gratia'), for instance EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants) European Community EC ECHA European Chemicals Agency ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect EEC European Economic Community European Inventory of Existing Commercial Chemical Substances EINECS ELINCS European List of Notified Chemical Substances EN European Norms EPA United States Environmental Protection Agency (United States of America) $ErCx, E\mu Cx, ErLx (x = 10, 50)$ Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants) etc. et cetera European Union EU EVAL Ethylene-vinyl alcohol copolymer Fax. Fax number deneral aen. Globally Harmonized System of Classification and Labelling of Chemicals GHS Global warming potential GWP Adsorption coefficient of organic carbon in the soil Koc Kow octanol-water partition coefficient IARC International Agency for Research on Cancer International Air Transport Association IATA IBC (Code) International Bulk Chemical (Code) IMDG-code International Maritime Code for Dangerous Goods incl. including, inclusive **IUCLID** International Uniform Chemical Information Database



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The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by

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