

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.05.2017

Version number 302

Revision: 19.05.2017

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

- **1.1 Product identifier**
- **Trade name:** Kesselreiniger-Spray
- **Article number:** -
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 - SU21 Consumer uses: Private households / general public / consumers
 - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Application of the substance / the mixture** Cleaning material/ Detergent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 - Klostermann Chemie GmbH & Co. KG
 - von-dem-Bussche-Münch-Str. 4
 - 32339 Espelkamp
- Tel.: 05772/6711
- Fax: 05772/6799
- www.klostermann-chemie.de
- E-Mail: info@klostermann-chemie.de
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**
 - Poison Control Center Mainz - 24 hour emergency service – phone: +49 (0) 6131/19240

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 - The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02

- **Signal word** Danger
- **Hazard statements**
 - H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
- **Precautionary statements**
 - P101 If medical advice is needed, have product container or label at hand.
 - 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.
 - P271 Use only outdoors or in a well-ventilated area.

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*P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***Additional information:***Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.***2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

| | | |
|--|--|---------|
| CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx | propane ⚠ Flam. Gas 1, H220; Press. Gas C, H280 | 2.5-10% |
| CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx | butane ⚠ Flam. Gas 1, H220; Press. Gas C, H280 | 2.5-10% |
| CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx | isobutane ⚠ Flam. Gas 1, H220; Press. Gas C, H280 | 2.5-10% |
| CAS: 55965-84-9 | reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Sens. 1, H317 | < 1% |

Regulation (EC) No 648/2004 on detergents / Labelling for contents*15 % or over but less than 30 %
aliphatic hydrocarbons***Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures**General information:** No special measures required.**After inhalation:***Supply fresh air.**Seek medical treatment in case of complaints.***After skin contact:***Immediately wash with water and soap and rinse thoroughly.**If skin irritation continues, consult a doctor.***After eye contact:***Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.***After swallowing:***Rinse out mouth and then drink plenty of water.*

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If symptoms persist consult doctor.

- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **For safety reasons unsuitable extinguishing agents:** *Water with full jet*

- **5.2 Special hazards arising from the substance or mixture** *Can form explosive gas-air mixtures.*

- **5.3 Advice for firefighters**

- **Protective equipment:** *Wear self-contained respiratory protective device.*

- **Additional information** *Cool endangered receptacles with water spray.*

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

*Wear protective equipment. Keep unprotected persons away.**Ensure adequate ventilation*

- **6.2 Environmental precautions:**

*Inform respective authorities in case of seepage into water course or sewage system.**Do not allow to enter sewers/ surface or ground water.*

- **6.3 Methods and material for containment and cleaning up:** *Ensure adequate ventilation.*

- **6.4 Reference to other sections**

*See Section 7 for information on safe handling.**See Section 8 for information on personal protection equipment.**See Section 13 for disposal information.*

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** *Use only in well ventilated areas.*

- **Information about fire - and explosion protection:**

*Keep ignition sources away - Do not smoke.**Protect against electrostatic charges.**Do not spray onto a naked flame or any incandescent material.**Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.*

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

*Store in a cool location.**Observe official regulations on storing packagings with pressurised containers.*

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- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

· 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

106-97-8 butane

| | |
|-----|---|
| WEL | Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene) |
|-----|---|

- **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

- **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.
Short term filter device:
Filter A/P2

- **Protection of hands:**



Protective gloves

- **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

· General Information

- **Appearance:**

Form:

Aerosol

Colour:

According to product specification

- **Odour:**

Characteristic

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| | |
|--|--|
| · Odour threshold: | Not determined. |
| · pH-value: | Not determined. |
| · Change in condition Melting point/freezing point: | Undetermined. |
| Initial boiling point and boiling range: | Not applicable, as aerosol. |
| · Flash point: | Not applicable, as aerosol. |
| · Flammability (solid, gas): | Not applicable. |
| · Ignition temperature: | 365 °C |
| · Decomposition temperature: | Not determined. |
| · Auto-ignition temperature: | Product is not selfigniting. |
| · Explosive properties: | Not determined. |
| · Explosion limits: Lower: | Not determined. |
| Upper: | Not determined. |
| · Oxidising properties | Not determined. |
| · Vapour pressure at 20 °C: | 4200 hPa |
| · Density at 20 °C: | 0.89 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not applicable. |
| · Solubility in / Miscibility with water: | Not miscible or difficult to mix. |
| · Partition coefficient: n-octanol/water: | Not determined. |
| · Viscosity: Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| VOC (EC) % | 15.73 % |
| VOC (EC) g/l | 140 g/l |
| VOCV (CH) | 15.73 % |
| | 15.73 % |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods:**
Containers can be recycled if completely empty; if not, dispose product/containers as dangerous waste.
Observe local regulations.

- **European waste catalogue**

| | |
|-----------|---|
| 15 01 04 | metallic packaging |
| 16 05 04* | gases in pressure containers (including halons) containing hazardous substances |

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SECTION 14: Transport information

| | |
|---|--|
| · 14.1 UN-Number | UN1950 |
| · ADR, IMDG, IATA | |
| · 14.2 UN proper shipping name | UN1950 AEROSOLS |
| · ADR | AEROSOLS |
| · IMDG, IATA | |
| · 14.3 Transport hazard class(es) | |
| · ADR | |
|  | |
| · Class | 2 5F Gases. |
| · Label | 2.1 |
| · IMDG, IATA | |
|  | |
| · Class | 2 Gases. |
| · Label | 2.1 |
| · 14.4 Packing group | |
| · ADR | Void |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Warning: Gases. |
| · EMS Number: | F-D,S-U |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR | |
| · Limited quantities (LQ) | 1L |
| · Excepted quantities (EQ) | Code: E0 Not permitted as Excepted Quantity |
| · Transport category | 2 |
| · Tunnel restriction code | D |
| · IMDG | |
| · Limited quantities (LQ) | 1L |
| · Excepted quantities (EQ) | Code: E0 Not permitted as Excepted Quantity |
| · UN "Model Regulation": | UN 1950 AEROSOLS, 2.1 |

SECTION 15: Regulatory information

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I potassium nitrate
- Seveso category P3a FLAMMABLE AEROSOLS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t

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- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.
- **Exposure scenario(s)**
Exposure scenario(s) of ingredients (if present) are available on request at:
info@klostermann-chemie.de

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H331 Toxic if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas C: Gases under pressure – Compressed gas
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Sens. 1: Skin sensitisation – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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