

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 01.12.2017

Version number 303

Revision: 01.12.2017

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

- **1.1 Product identifier**
- **Trade name:** Brennerreiniger-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. |
- |   |  |
|---|--|
|  | GHS09 environment                                |
| Aquatic Chronic 2 H411  | Toxic to aquatic life with long lasting effects. |
- |   |  |
|---|--|
|  | GHS07  |
| Skin Irrit. 2   | H315 Causes skin irritation.                       |
| Eye Irrit. 2  | H319 Causes serious eye irritation.                |
| STOT SE 3   | H336 May cause drowsiness or dizziness.            |
| Asp. Tox. 1   | H304 May be fatal if swallowed and enters airways. |
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
 The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

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**Trade name: Brennerreiniger-Spray**

(Contd. of page 1)

**· Hazard pictograms**

GHS02 GHS07 GHS09

**· Signal word Danger****· Hazard-determining components of labelling:**

Naphtha (petroleum), hydrotreated light (Benzene &lt; 0.1%)

**· Hazard statements**

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

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

**· 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.

P280 Wear protective gloves / eye protection.

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.

**· 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: 64742-49-0 EINECS: 265-151-9 Reg.nr.: 01-2119475133-43-XXXX	Naphtha (petroleum), hydrotreated light (Benzene < 0.1%) ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	25-50%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25-xxxx	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	25-50%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10-<25%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10-<25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10-<25%

(Contd. on page 3)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 01.12.2017

Version number 303

Revision: 01.12.2017

**Trade name: Brennerreiniger-Spray**

(Contd. of page 2)

- **Regulation (EC) No 648/2004 on detergents / Labelling for contents**  
30 % and more  
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:** Immediately remove any clothing soiled by the product.
- **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. Then consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
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:**  
CO<sub>2</sub>, 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.

(Contd. on page 4)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 01.12.2017

Version number 303

Revision: 01.12.2017

Trade name: Brennerreiniger-Spray

(Contd. of page 3)

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.
- **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:**

CAS: 67-63-0 propan-2-ol

WEL	Short-term value: 1250 mg/m <sup>3</sup> , 500 ppm
	Long-term value: 999 mg/m <sup>3</sup> , 400 ppm

CAS: 106-97-8 butane

WEL	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm
	Long-term value: 1450 mg/m <sup>3</sup> , 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

(Contd. on page 5)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 01.12.2017

Version number 303

Revision: 01.12.2017

**Trade name: Brennerreiniger-Spray**

(Contd. of page 4)

**· Protection of hands:**

Protective gloves

**· Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material:  $\geq 0.4$  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.

**· Eye protection:**

Tightly sealed goggles

**· Body protection: Impervious protective clothing**

## SECTION 9: Physical and chemical properties

**· 9.1 Information on basic physical and chemical properties****· General Information****· Appearance:****Form:** Aerosol**Colour:** Colourless**· Odour:** Characteristic**· 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:** 260 °C**· Decomposition temperature:** Not determined.**· Auto-ignition temperature:** Product is not selfigniting.**· Explosive properties:** Not determined.**· Explosion limits:****Lower:** 1,5 Vol %**Upper:** 12,0 Vol %**· Oxidising properties** Not determined.**· Vapour pressure at 20 °C:** 4200 hPa**· Density at 20 °C:** 0,654 g/cm<sup>3</sup>**· Relative density** Not determined.**· Vapour density** Not determined.

(Contd. on page 6)

**Safety data sheet**  
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Version number 303

Revision: 01.12.2017

**Trade name: Brennerreiniger-Spray**

(Contd. of page 5)

- |  |  |
|--|--|
| · <b>Evaporation rate</b>                        | Not applicable.                            |
| · <b>Solubility in / Miscibility with water:</b> | Not miscible or difficult to mix.          |
| · <b>Partition coefficient: n-octanol/water:</b> | Not determined.                            |
| · <b>Viscosity:</b>                              |  |
| <b>Dynamic:</b>                                  | Not determined.                            |
| <b>Kinematic:</b>                                | Not determined.                            |
| <b>Organic solvents:</b>                         | 100,0 %                                    |
| <b>VOC (EC) %</b>                                | 654.0 g/l                                  |
| <b>VOCV (CH)</b>                                 | 100.00 %                                   |
| · <b>9.2 Other information</b>                   | 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** Reacts with oxidising agents.
- **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.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

CAS: 64742-49-0 Naphtha (petroleum), hydrotreated light (Benzene < 0.1%)

Oral	LD50	>5,840 mg/kg (rat)
Dermal	LD50	>2,920 mg/kg (rat)
Inhalative	LC50/4h	>25 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **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**  
May cause drowsiness or dizziness.

(Contd. on page 7)

GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 01.12.2017

Version number 303

Revision: 01.12.2017

Trade name: **Brennerreiniger-Spray**

(Contd. of page 6)

- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard**  
May be fatal if swallowed and enters airways.

### 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.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **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.  
Also poisonous for fish and plankton in water bodies.
- **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

### SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR** UN1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
- **IMDG, IATA** AEROSOLS

(Contd. on page 8)

GB

**Safety data sheet**  
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**Trade name: Brennerreiniger-Spray**

(Contd. of page 7)

## · 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, IMDG, IATA Void

## · 14.5 Environmental hazards:

· Marine pollutant: No  
· Special marking (ADR): Symbol (fish and tree)

## · 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, ENVIRONMENTALLY HAZARDOUS

### SECTION 15: Regulatory information

## · Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

## · Seveso category

P3a FLAMMABLE AEROSOLS

E2 Hazardous to the Aquatic Environment

· Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t

· Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

(Contd. on page 9)

GB

**Safety data sheet**  
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Version number 303

Revision: 01.12.2017

**Trade name: Brennerreiniger-Spray**

(Contd. of page 8)

· **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.  
H225 Highly flammable liquid and vapour.  
H280 Contains gas under pressure; may explode if heated.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** Product safety department

· **Contact:** Head of Product Safety Department

· **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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Flam. Liq. 2: Flammable liquids – Category 2

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2