

# Safety data sheet

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

Printing date 30.03.2015

Version number 201

Revision: 30.03.2015

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

· **1.1 Product identifier**

· **Trade name:** Multi-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** Lubricant

· **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

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

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F+; Extremely flammable

R12: Extremely flammable.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurised container.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **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

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









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- **Signal word** *Danger*
- **Hazard statements**
  - H222-H229 *Extremely flammable aerosol. Pressurised container: May burst if heated.*
  - H412 *Harmful 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.*
  - P251 *Do not pierce or burn, even after use.*
  - P211 *Do not spray on an open flame or other ignition source.*
  - P273 *Avoid release to the environment.*
  - 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:**
  - Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.*
  - Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.*
- **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  F+ R12  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  F+ R12  Flam. Gas 1, H220; Press. Gas C, H280	10-25%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane  F+ R12  Flam. Gas 1, H220; Press. Gas C, H280	10-25%
CAS: 64742-82-1 EINECS: 265-185-4 Reg.nr.: 01-2119458049-33	Naphtha (petroleum), hydrodesulfurized heavy (Benzene < 0.1%)  Xn R65;  N R51/53 R10-66-67  Flam. Liq. 2, H225;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  STOT SE 3, H336	2.5-10%
CAS: 78-78-4 EINECS: 201-142-8	isopentane  Xn R65;  F+ R12;  N R51/53 R66-67  Flam. Liq. 1, H224;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  STOT SE 3, H336	< 1%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.

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- **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.  
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.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

### 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:**  
Do not allow to enter sewers/ surface or ground water.  
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents
- **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.

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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:**

**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

· **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.

· **Eye protection:** Recommendation: safety glasses with side protection shield

· **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:** Colourless

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· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Not applicable, as aerosol.
· <b>Flash point:</b>	Not applicable, as aerosol.
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	240 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Not determined.
· <b>Explosion limits:</b>	
<b>Lower:</b>	1.5 Vol %
<b>Upper:</b>	10.9 Vol %
· <b>Vapour pressure at 20 °C:</b>	4200 hPa
· <b>Density at 20 °C:</b>	0.67025 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <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>9.2 Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **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.

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

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

**64742-82-1 Naphtha (petroleum), hydrodesulfurized heavy (Benzene < 0.1%)**

Oral	LD50	>5000 mg/kg (rat)
Inhalative	LC50/4h	> 24 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.

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- **on the eye:** No irritating effect.
- **Sensitisation:** No sensitising effects known.

### 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:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
 Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
 Harmful to aquatic organisms
- **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.

· <b>European waste catalogue</b>	
15 01 04	metallic packaging
16 05 05	gases in pressure containers other than those mentioned in 16 05 04

### SECTION 14: Transport information

- |   |                     |
|---|---------------------|
| · <b>14.1 UN-Number</b>   |                     |
| · <b>ADR, IMDG, IATA</b>  | UN1950              |
| · <b>14.2 UN proper shipping name</b>   |                     |
| · <b>ADR</b>  | UN1950 AEROSOLS     |
| · <b>IMDG</b>   | AEROSOLS            |
| · <b>IATA</b>   | AEROSOLS, flammable |
| · <b>14.3 Transport hazard class(es)</b>  |                     |
| · <b>ADR</b>  |                     |
|  |                     |
| · <b>Class</b>  | 2 5F Gases.         |

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· <b>Label</b>	2.1
· <b>IMDG, IATA</b>	
	
· <b>Class</b>	2.1
· <b>Label</b>	2.1
· <b>14.4 Packing group</b>	
· <b>ADR, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b>	Product contains environmentally hazardous substances: Naphtha (petroleum), hydrodesulfurized heavy (Benzene < 0.1%)
· <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b>	Warning: Gases.
· <b>Danger code (Kemler):</b>	-
· <b>EMS Number:</b>	F-D,S-U
· <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E0 Not permitted as Excepted Quantity
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	D
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E0 Not permitted as Excepted Quantity
· <b>UN "Model Regulation":</b>	UN1950, AEROSOLS, 2.1

### SECTION 15: Regulatory information

- **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.  
H224 Extremely flammable liquid and vapour.  
H225 Highly flammable liquid and vapour.  
H280 Contains gas under pressure; may explode if heated.  
H304 May be fatal if swallowed and enters airways.  
H336 May cause drowsiness or dizziness.

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*H411 Toxic to aquatic life with long lasting effects.**R10 Flammable.**R12 Extremely flammable.**R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**R65 Harmful: may cause lung damage if swallowed.**R66 Repeated exposure may cause skin dryness or cracking.**R67 Vapours may cause drowsiness and dizziness.***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)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**Flam. Gas 1: Flammable gases, Hazard Category 1**Flam. Aerosol 1: Flammable aerosols, Hazard Category 1**Press. Gas C: Gases under pressure: Compressed gas**Flam. Liq. 1: Flammable liquids, Hazard Category 1**Flam. Liq. 2: Flammable liquids, Hazard Category 2**STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3**Asp. Tox. 1: Aspiration hazard, Hazard Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2**Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3*

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