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

· 1.1 Product identifier

· Trade name: Rostlöser-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 Penetrating oil

· 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



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

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

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



F+; Extremely flammable

R12: Extremely flammable.

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



· Signal word Danger

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· Hazard-determining components of labelling:

Distillates (petroleum), hydrotreated heavy paraffinic (Benzene < 0.1%)

· 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.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

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.

Buildup of explosive mixtures possible without sufficient ventilation.

- · 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: 64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic (Benzene	50-100%
EINECS: 265-157-1	< 0.1%)	
	★ Xn R65	
	R66	
	♦ Asp. Tox. 1, H304	
CAS: 74-98-6	propane	10-25%
EINECS: 200-827-9	♦ F+ R12	
Reg.nr.: 01-2119486944-21-xxxx	📀 Flam. Gas 1, H220; Press. Gas C, H280	
CAS: 106-97-8	butane	10-25%
EINECS: 203-448-7	♦ F+ R12	
Reg.nr.: 01-2119474691-32-xxxx	🔖 Flam. Gas 1, H220; Press. Gas C, H280	
CAS: 75-28-5	isobutane	10-25%
EINECS: 200-857-2	♦ F+ R12	
Reg.nr.: 01-2119485395-27-xxxx	Flam. Gas 1, H220; Press. Gas C, H280	
CAS: 34590-94-8	(2-methoxymethylethoxy)propanol	2.5-10%
EINECS: 252-104-2	substance with a Community workplace exposure limit	

· Regulation (EC) No 648/2004 on detergents / Labelling for contents aliphatic hydrocarbons

· 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
- · After inhalation:

Supply fresh air.

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≥ 30%

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

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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:

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: Mouth 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: 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.

- · Information about storage in one common storage facility: Store away from oxidising agents.
- · Further information about storage conditions: None.

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· 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/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm

Carc (if more than 0.1% of buta-1.3-diene)
34590-94-8 (2-methoxymethylethoxy)propanol

WEL Long-term value: 308 mg/m³, 50 ppm Sk

- · 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

Odour: Aromatic

Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

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	(Contd.	of page
Boiling point/Boiling range:	Not applicable, as aerosol.	
· Flash point:	Not applicable, as aerosol.	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	365 °C	
· Decomposition temperature:	Not determined.	
· Self-igniting:	Product is not selfigniting.	
· Danger of explosion:	Not determined.	
· Explosion limits:		
Lower:	1.5 Vol %	
Upper:	10.9 Vol %	
· Vapour pressure at 20 °C:	4200 hPa	
· Density at 20 °C:	$0.685 \ g/cm^3$	
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/wa	t ter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
VOC (EC) %	100.00 %	
VOC(EC) g/l	685.0 g/l	
VOCV (CH)	100.00 %	
· 9.2 Other information	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 Reacts with strong 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:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · 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.

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- · 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.

_	waste catalogue
15 01 04	metallic packaging

16 05 04* gases in pressure containers (including halons) containing dangerous substances

SECTION 14: Transport information

- · 14.1 UN-Number
- · ADR, IMDG, IATA UN1950
- · 14.2 UN proper shipping name
- · ADR UN1950 AEROSOLS
- · IMDG, IATA AEROSOLS
- · 14.3 Transport hazard class(es)
- $\cdot ADR$



- · Class 2 5F Gases.
- · Label
- · IMDG, IATA



- · Class
 · Label
 2 Gases.
 2.1
- · 14.4 Packing group
- · ADR, IMDG, IATA Void
- · 14.5 Environmental hazards:
- · Marine pollutant: No
- · 14.6 Special precautions for user Warning: Gases.

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· EMS Number:	F-D,S-U	
· 14.7 Transport in bulk according to Anne	ex II of	
MARPOL73/78 and the IBC Code	Not applicable.	
· Transport/Additional information:		
\cdot ADR		
· Limited quantities (LQ)	1L	
\cdot 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'':	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.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

R12 Extremely flammable.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

· 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, Schweis (Swiss Ordinance on volatile organic compounds)

VOC: Volatile Organic Compounds (USA, EU) Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas C: Gases under pressure: Compressed gas

Asp. Tox. 1: Aspiration hazard, Hazard Category 1