

Printing date 23.01.2019 Version number 1 Revision: 23.01.2019

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

- · 1.1 Product identifier
- Trade name: pool fermit Edelstahlpflege-Spray
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 No further relevant information available.
- · Application of the substance / the mixture Maintenance product
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Fermit GmbH Zur Heide 4, D- 53560 Vettelschoß www.fermit.de

Informing department:

Tel.: +49 (0) 2645-2207 Fax: +49 (0) 2645-3113 Email: info@fermit.de

1.4 Emergency telephone number: Tel.: +49 (0) 2645-2207

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

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 ℃/122 ℉.

- 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.

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· vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below including additives not requiring identification.

Dangerous	compone	ents:

CAS: 106-97-8 butane 50 - 100% Flam. Gas 1, H220; Press. Gas (Comp.), H280 Flam. Gas 1, H220; Press. Gas (Comp.), H280

· 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
- After inhalation

Supply fresh air.

In case of persistent symptoms consult doctor.

After skin contact

Wash with water and soap.

In cases of freeze burns, rinse with plenty of water. Do not remove clothing.

After eye contact

Rinse opened eye for several minutes under running water.

In case of permanent aches and pains please go and see the doctor.

- · After swallowing Swallowing is not considered to be a possible way of exposure.
- 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, extinguishing powder or water jet. Fight larger fire with alcohol-resistant foam.

- · For safety reasons unsuitable extinguishing agents Water with a full water jet.
- · 5.2 Special hazards arising from the substance or mixture

During incomplete combustion carbon monoxide can be formed.

Pressure build-up and risk of bursting when heated.

Vapours are heavier than air and may travel long distances along ground, ignite and flash back to source.

- 5.3 Advice for firefighters
- Protective equipment:

Do not inhale explosion gases or combustion gases.

In case of fire wear breathing equipment being independent of ambient air and suit provided full protection against chemicals.

Additional information

Cool endangered containers with water spray.

Remove goods in stock from incendiary zone, if possible.

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SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from sources of ignition - No smoking.

- 6.2 Environmental precautions: Damp down gases/fumes/haze with water spray jet.
- 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 information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Keep away from heat and direct sunlight.

Keep empty containers away from heat and ignition sources.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50℃. Do not open by force or throw into fire even after use.

Do not spray on flames or red-hot objects.

- 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and containers:

Observe official regulations on storing packagings with pressurised containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters
- Components with limit values that require monitoring at the workplace:

WEL: workplace exposure limit

106-97-8 butane

WEL (Great Britain) 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)

- · Additional information: The lists that were valid during the compilation were used as basis.
- 8.2 Exposure controls
- Personal protective equipment
- General protective and hygienic measures

Do not eat, drink or smoke while working.

Wash hands during breaks and at the end of the work.

Do not inhale gases / fumes / aerosols.

Breathing equipment:

Not necessary if room is well-ventilated.

Use breathing protection in case of insufficient ventilation.

Filter AX.

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Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

In case of a layer thickness of 0.7 mm the penetration time is longer than 480 minutes. 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 safety glasses.

Body protection:

Wear antistatic clothing made from natural fibres (cotton) or heat-resistant synthetic fibres.

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:	Not determined			
Initial boiling point and boiling ra	ange: Not applicable, as aerosol			
Flash point:	ca60 ℃			
Inflammability (solid, gaseous)	Not applicable.			
Decomposition temperature:	Not determined.			
Explosive properties:	Not determined.			
Critical values for explosion:				
Lower:	1.8 Vol %			
Upper:	8.4 Vol %			
Vapour pressure:	Not determined.			
Density	0.855 g/cm ³			
Evaporation rate	Not applicable.			
Solubility in / Miscibility with				
Water:	Not determined.			

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Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

dynamic:Not determined.kinematic:Not determined.

Solvent content:

· Organic solvents:

VOC EU 455 g/l **VOC EU** 75.2 %

• 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:

Avoid direct sunlight, heat and ignition sources.

10.3 Possibility of hazardous reactions

Danger of containers bursting because of high vapour pressure

- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Strong oxidizing agents
- 10.6 Hazardous decomposition products:

None in case of intended use and storage in compliance with instructions.

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 Contact with liquified product can cause frostbite.
- · 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 (carcinogenity, 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.
- Other information: There are no data available about the preparation.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes: Generally not hazardous for water.
- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

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· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- Recommendation

Proceed according to local, official regulations.

The waste code numbers mentioned are recommendations based on the probable use of the product.

· European waste catalogue						
16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST					
16 05 00	gases in pressure containers and discarded chemicals					
16 05 04*	gases in pressure containers (including halons) containing hazardous substances					
14 00 00	WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08)					
14 06 00	waste organic solvents, refrigerants and foam/aerosol propellants					
14 06 03*	other solvents and solvent mixtures					

- · Uncleaned packagings:
- Recommendation:

After use the packaging shall be discharged completely.

Dispose of packaging according to regulations on the disposal of packagings.

SECTION 14: Transport information

- · 14.1 UN-Number
- · ADR, IMDG, IATA UN1950
- 14.2 UN proper shipping name
- · ADR 1950 AEROSOLS IMDG AEROSOLS
- IMDGIATAAEROSOLSAEROSOLS, flammable
- · 14.3 Transport hazard class(es)
- ADR



- · Class 2 5F Gases.
- · **Label** 2.1
- · IMDG, IATA



- Class 2.1 • Label 2.1
- · 14.4 Packing group
- · ADR, IMDG, IATA Void

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14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Warning: Gases.
Kemler Number:	-
EMS Number:	F-D,S-U
Stowage Code Segregation Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity 1 litre: Segregation as for class 9. Stow "separate from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
	10: 11:0 appropriate casarries. 0: 0:acc 2:
14.7 Transport in bulk according to A of Marpol and the IBC Code	nnex II Not applicable.
of Marpol and the IBC Code	
of Marpol and the IBC Code Transport/Additional information:	
of Marpol and the IBC Code Transport/Additional information: ADR	Not applicable. 1L Code: E0
of Marpol and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) Excepted quantities (EQ)	Not applicable. 1L Code: E0 Not permitted as Excepted Quantity
of Marpol and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) Excepted quantities (EQ) Transport category	Not applicable. 1L Code: E0 Not permitted as Excepted Quantity 2
of Marpol and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) Excepted quantities (EQ)	Not applicable. 1L Code: E0 Not permitted as Excepted Quantity
of Marpol and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) Excepted quantities (EQ) Transport category	Not applicable. 1L Code: E0 Not permitted as Excepted Quantity 2
of Marpol and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) Excepted quantities (EQ) Transport category Tunnel restriction code	Not applicable. 1L Code: E0 Not permitted as Excepted Quantity 2
of Marpol and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) Excepted quantities (EQ) Transport category Tunnel restriction code IMDG	Not applicable. 1L Code: E0 Not permitted as Excepted Quantity 2 D 1L Code: E0
of Marpol and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) Excepted quantities (EQ) Transport category Tunnel restriction code IMDG Limited quantities (LQ)	Not applicable. 1L Code: E0 Not permitted as Excepted Quantity 2 D

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P3a FLAMMABLE AEROSOLS
- · 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
- · National regulations
- · Water hazard class: Generally not hazardous for water.
- · Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is contained.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

These data are based on our present knowledge. However, they 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.

Department issuing data specification sheet:

This Material Safety Data Sheet has been drawn up in cooperation with:

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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)

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative Flam. Gas 1: Flammable gases - Category 1

Aerosol 1: Aerosols - Category 1

Press. Gas (Comp.): Gases under pressure - Compressed gas