

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

- **1.1 Product identifier**
- **Trade name:** *Stainless steel spray*
- **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** *Maintenance product*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 E/D/E - Einkaufsbuero Deutscher Eisenhaendler GmbH
 EDE Platz 1
 D-42389 Wuppertal
 Germany

 Tel. +49 202 6096-0
 e-mail: *sdb@ede.de*
- **Further information obtainable from:** *Product safety department*
- **1.4 Emergency telephone number:** *Giftinformationszentrum Mainz – Tel.: +49 (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.

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.
- **Hazard pictograms**



GHS02

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**
white mineral oil
- **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.*
 P271 *Use only outdoors or in a well-ventilated area.*
 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.*

(Contd. on page 2)

Trade name: Stainless steel spray

(Contd. of page 1)

- **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: 8042-47-5 EINECS: 232-455-8 Reg.nr.: 01-2119487078-27-xxxx	white mineral oil ⚠ Asp. Tox. 1, H304	25-50%
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: 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: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10-25%

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

aliphatic hydrocarbons	≥ 30%
------------------------	-------

- **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.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **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** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **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.

(Contd. on page 3)

Trade name: Stainless steel spray

(Contd. of page 2)

- 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.

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:**
Keep container tightly sealed.
Protect from heat and direct sunlight.
- **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:**
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
- **Respiratory protection:**
Use suitable respiratory protective device in case of insufficient ventilation.
Filter A/P2
- **Protection of hands:** Recommendation: protective gloves
- **Material of gloves**
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.4 mm

(Contd. on page 4)

Trade name: *Stainless steel spray*

(Contd. of page 3)

- **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:** *Impervious protective clothing*

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	<i>Aerosol</i>
· Colour:	<i>Colourless</i>
· Odour:	<i>Recognisable</i>
· Odour threshold:	<i>Not determined.</i>

· **pH-value:** *Not determined.*

· Change in condition

· Melting point/Melting range:	<i>Undetermined.</i>
· Boiling point/Boiling range:	<i>Not applicable, as aerosol.</i>

· **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:	<i>0.9 Vol %</i>
· Upper:	<i>10.9 Vol %</i>

· **Vapour pressure at 20 °C:** *4200 hPa*

· **Density at 20 °C:** *0.66499 g/cm³*

· **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:	<i>Not determined.</i>
· Kinematic:	<i>Not determined.</i>

· **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** *No dangerous reactions known.*

· **10.4 Conditions to avoid** *No further relevant information available.*

· **10.5 Incompatible materials:** *No further relevant information available.*

(Contd. on page 5)

Trade name: Stainless steel spray

(Contd. of page 4)

- **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:**

8042-47-5 white mineral oil

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitisation:** No sensitising effects known.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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 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.
- **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.
- **Recommendation**
Completely emptied packagings can be given for recycling. (In accordance with local authority regulations, take to chemical/physical treatment plant.)

- **European waste catalogue**

16 05 05 | gases in pressure containers other than those mentioned in 16 05 04

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA**

UN1950

(Contd. on page 6)

Trade name: Stainless steel spray

(Contd. of page 5)

· **14.2 UN proper shipping name**
 · **ADR** 1950 AEROSOLS
 · **IMDG** AEROSOLS
 · **IATA** AEROSOLS, 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

· **14.5 Environmental hazards:**
 · **Marine pollutant:** No

· **14.6 Special precautions for user** Warning: Gases.
 · **Danger code (Kemler):** -
 · **EMS Number:** F-D,S-U

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**
 · **Limited quantities (LQ)** 1L
 · **Transport category** 3
 · **Tunnel restriction code** E

· **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.

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.
- **Department issuing MSDS:** Product safety department
- **Contact:** Head of Product Safety Department

(Contd. on page 7)

Trade name: Stainless steel spray

(Contd. of page 6)

· 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

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

GB