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

Printing date 28.02.2023 Version number 2 Revision: 28.02.2023

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

· **1.1 Product identifier**

· **Trade name: Scheiben-Enteiser**
· **UFI:** GS0W-S055-W00H-E3NH
· **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** Antifreeze

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Kuttenkeuler GmbH
Dieselstraße 10
50996 Köln
Germany
vertrieb.schmierstoffe@kuttenkeuler.com

· **Further information obtainable from:**
Product safety department
Tel: +49 (0) 2236 96203-0
Fax: +49 (0) 2236 96203-27
E-Mail: msds@kuttenkeuler.com
· **1.4 Emergency telephone number:**
Informationszentrale gegen Vergiftungen
des Landes Nordrhein-Westfalen
Tel.: +49 (0) 228 / 19 240

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## SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.

· **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** Warning
· **Hazard statements**
H226 Flammable liquid and vapour.
· **Precautionary statements**

| | |
|---|---|
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P103 | Read carefully and follow all instructions. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof [electrical/ventilating/lighting] equipment. |

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P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P403+P235 Store in a well-ventilated place. Keep cool.
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.

| · **Determination of endocrine-disrupting properties** | | |
|---|---|---|
| 78-93-3 | butanone | List II |

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## SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture: consisting of the following components.

| · **Dangerous components:** | | |
|---|---|---|
| 64-17-5 | ethanol<br>Flam. Liq. 2, H225; Eye Irrit. 2, H319<br>Specific concentration limit: Eye Irrit. 2; H319: C ≥ 50 % | 25-40% |
| 107-21-1 | ethanediol<br>STOT RE 2, H373; Acute Tox. 4, H302 | 2-8% |
| 78-93-3 | butanone<br>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066 | 0,1-1% |

· **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; consult doctor in case of complaints.
· **After skin contact:** Immediately rinse with water.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:** A person vomiting while laying on their back should be turned onto their side.
· **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.
· **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
· **5.3 Advice for firefighters**
· **Protective equipment:** Wear self-contained respiratory protective device.

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· **Additional information**
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**
Keep away from ignition sources.
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
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.

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## SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Keep away from heat and direct sunlight.
Keep receptacles tightly sealed.
· **Information about fire - and explosion protection:**
Use explosion-proof apparatus / fittings and spark-proof tools.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in the original receptacle.
· **Information about storage in one common storage facility:** Store away from flammable substances.
· **Further information about storage conditions:** Keep container tightly sealed.
· **7.3 Specific end use(s)** Coolant

## SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

| **64-17-5 ethanol** | |
|---|---|
| AGW (Germany) | Long-term value: 380 mg/m³, 200 ppm<br>4(II);DFG, Y |
| **107-21-1 ethanediol** | |
| AGW (Germany) | Long-term value: 26 mg/m³, 10 ppm<br>2(I);DFG, EU, H, Y, 11 |

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Appropriate engineering controls** No further data; see item 7.

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· **Individual protection measures, such as personal protective equipment**

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· **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
· **Respiratory protection:** Not required.
· **Hand protection**
Solvent resistant gloves

Protective gloves

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**
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0,7 mm
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**
Value for the permeation: Level ≤ 480
The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye/face protection**

Tightly sealed goggles

· **Body protection:** Protective work clothing

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## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**

| | |
|---|---|
| · **Physical state** | Fluid |
| · **Colour:** | Blue |
| · **Odour:** | Pleasant |
| · **Odour threshold:** | Not determined. |
| · **Melting point/freezing point:** | Undetermined. |
| · **Boiling point or initial boiling point and boiling range** | Undetermined. |
| · **Flammability** | Flammable. |
| · **Lower and upper explosion limit** | |
| · **Lower:** | 3,8 Vol % |
| · **Upper:** | 19 Vol % |

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| | |
|---|---|
| · **Flash point:** | 26 °C |
| · **Ignition temperature:** | 490 °C (DIN 51794) |
| · **Decomposition temperature:** | Not determined. |
| · **pH at 20 °C** | 7,5 |
| · **Viscosity:** | |
| · **Kinematic viscosity** | Not determined. |
| · **Dynamic:** | Not determined. |
| · **Solubility** | |
| · **water:** | Fully miscible. |
| · **Partition coefficient n-octanol/water (log value)** | Not determined. |
| · **Vapour pressure:** | Not determined. |
| · **Density and/or relative density** | |
| · **Density at 20 °C:** | 0,95 g/cm³ |
| · **Relative density** | Not determined. |
| · **Vapour density** | Not determined. |

| | |
|---|---|
| · **9.2 Other information** | |
| · **Appearance:** | |
| · **Form:** | Fluid |
| · **Important information on protection of health and environment, and on safety.** | |
| · **Auto-ignition temperature:** | Product is not selfigniting. |
| · **Explosive properties:** | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| · **Solvent content:** | |
| · **Organic solvents:** | 25,1-41 % |
| · **Water:** | >25,0 % |
| · **Change in condition** | |
| · **Evaporation rate** | Not determined. |

| | |
|---|---|
| · **Information with regard to physical hazard classes** | |
| · **Explosives** | Void |
| · **Flammable gases** | Void |
| · **Aerosols** | Void |
| · **Oxidising gases** | Void |
| · **Gases under pressure** | Void |
| · **Flammable liquids** | Flammable liquid and vapour. |
| · **Flammable solids** | Void |
| · **Self-reactive substances and mixtures** | Void |
| · **Pyrophoric liquids** | Void |
| · **Pyrophoric solids** | Void |
| · **Self-heating substances and mixtures** | Void |
| · **Substances and mixtures, which emit flammable gases in contact with water** | Void |
| · **Oxidising liquids** | Void |
| · **Oxidising solids** | Void |
| · **Organic peroxides** | Void |
| · **Corrosive to metals** | Void |
| · **Desensitised explosives** | Void |

## 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 strong oxidising agents.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.

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· **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

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## SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Based on available data, the classification criteria are not met.

| · **LD/LC50 values relevant for classification:** | | |
|---|---|---|
| **64-17-5 ethanol** | | |
| Oral | LD50 | 7.060 mg/kg (rat) |
| Inhalative | LC50/4 h | 20.000 mg/l (rat) |
| **107-21-1 ethanediol** | | |
| Oral | LD50 | 7.712 mg/kg (rat) |
| Dermal | LD50 | >3.500 mg/kg (rabbit) |
| Inhalative | LC50/4 h | >2,5 mg/l /6h (rat) |
| **78-93-3 butanone** | | |
| Oral | LD50 | 3.300 mg/kg (rat) |
| Dermal | LD50 | 5.000 mg/kg (rabbit) |

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **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.
· **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.
· **11.2 Information on other hazards**

| · **Endocrine disrupting properties** | | |
|---|---|---|
| 78-93-3 | butanone | List II |

## SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** Easily biodegradable
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
· **12.7 Other adverse effects**
· **Additional ecological information:**
· **General notes:**
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
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.



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## SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

| · **European waste catalogue** | |
|---|---|
| 16 01 14* | antifreeze fluids containing hazardous substances |

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

| | |
|---|---|
| · **14.1 UN number or ID number** | |
| · **ADR, IMDG, IATA** | UN1987 |
| · **14.2 UN proper shipping name** | |
| · **ADR** | 1987 ALCOHOLS, N.O.S. (ethanol, ETHYL METHYL KETONE (METHYL ETHYL KETONE)) |
| · **IMDG, IATA** | ALCOHOLS, N.O.S. (ethanol, ETHYL METHYL KETONE (METHYL ETHYL KETONE)) |
| · **14.3 Transport hazard class(es)** | |
| · **ADR, IMDG, IATA** | |
| · **Class** | 3 Flammable liquids. |
| · **Label** | 3 |
| · **14.4 Packing group** | |
| · **ADR, IMDG, IATA** | III |
| · **14.5 Environmental hazards:** | |
| · **Marine pollutant:** | No |
| · **14.6 Special precautions for user** | Warning: Flammable liquids. |
| · **Hazard identification number (Kemler code):** | 30 |
| · **EMS Number:** | F-E,S-E |
| · **Stowage Category** | A |
| · **14.7 Maritime transport in bulk according to IMO instruments** | Not applicable. |
| · **Transport/Additional information:** | |
| · **ADR** | |
| · **Limited quantities (LQ)** | 5L |
| · **Excepted quantities (EQ)** | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · **Transport category** | 3 |
| · **Tunnel restriction code** | D/E |

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| | |
|---|---|
| · **IMDG** | |
| · **Limited quantities (LQ)** | 5L |
| · **Excepted quantities (EQ)** | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · **UN "Model Regulation":** | UN 1987 ALCOHOLS, N.O.S. (ETHANOL, ETHYL METHYL KETONE (METHYL ETHYL KETONE)), 3, III |

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## 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** P5c FLAMMABLE LIQUIDS
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5.000 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50.000 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

| | | |
|---|---|---|
| 78-93-3 | butanone | 3 |

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

| | | |
|---|---|---|
| 78-93-3 | butanone | 3 |

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

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## 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**
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
EUH066 Repeated exposure may cause skin dryness or cracking.

· **Department issuing SDS:** Product safety department
· **Contact:** -
· **Date of previous version:** 19.08.2021
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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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
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
· *** Data compared to the previous version altered.**