


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

- **Product identifier**
- **Trade name:** Coolant cutting fluid KSS-Top
- **Article number:** 26510-01
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:**
For industrial use only
Screw cutting fluid
Metal working fluid
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**
Orbitalum Tools GmbH
Josef-Schüttler-Straße 17
DE-78224 Singen
Germany
Tel. +49 (0) 77 31 - 792 0
Fax +49 (0) 77 31 - 792 500
tools@orbitalum.com
www.orbitalum.com
- **Further information obtainable from:** lubrication@orbitalum.com
- **1.4 Emergency telephone number:**
Germany: Giftinformationszentrum Berlin Tel.: +49 (0)30-19240

2 Hazards identification

- **2.1 Classification of the substance or mixture:**
- **Classification according to Regulation (EC) No 1272/2008**
Acute Tox. 4 H302 Harmful if swallowed.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
- **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**


GHS07 GHS08
- **Signal word** Warning
- **Hazard-determining components of labelling:**
ethanediol
- **Hazard statements**
H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

3 Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Declarable, or hazardous components:**

CAS-no.

EINECS: 203-473-3

Reg.nr.: 01-2119456816-28-0000

ethanediol

STOT RE 2, H373; Acute Tox. 4, H302

>20-<30%

- **Additional information:**

For the wording of the listed risk phrases refer to section 16.

Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential.

4 First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** 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.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray.
- **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:** No special measures required.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** 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).
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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7 Handling and storage

7.1 Precautions for safe handling

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

Observe the general safety regulations when handling chemicals.

- **Information about fire - and explosion protection:** No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.

Information about storage in one common storage facility:

Do not store together with oxidising and acidic materials.

Store away from oxidising agents.

Further information about storage conditions:

Protect from heat and direct sunlight.

Protect from frost.

Optimal storage temperature between -20 °C and +40 °C.

Duration of storage: In closed original container, at least 36 months.

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

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 at the workplace:

General indication value for metalworking fluids (without obligation): 10 mg/m³.

Propylene glycol (>20-<30%)

WEL Long-term value: 474* 10** mg/m³, 150* ppm

*total vapour and particulates **particulates

ethanediol (>20-<30%)

WEL Short-term value: 104** mg/m³, 40** ppm

Long-term value: 10* 52** mg/m³, 20** ppm

Sk *particulate **vapour

- **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.

- **Respiratory protection:** Not required.

Material of gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the resultant standard EN 374.

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.

The break through, among others, depending on material density and the type of glove and therefore must be determined in each individual case.

Gloves must be inspected prior to use. Replace when worn!

Impervious gloves: nitrile rubber, minimum thickness of 0.3 mm.

Penetration time of glove material

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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- **Eye protection:** Eye protector with side protection (framed eyeglasses) EN 166.
- **Body protection:** Protective work clothing

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Weak, characteristic

· Change in condition:

Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	> 100 °C (DIN 51751 / ASTM D86)
Drip point:	Not applicable
Pour point:	< 0 °C (ISO 3016 / ASTM D97)

- **Flash point:** > 100 °C (ISO 2592 / ASTM D92)
- **Ignition temperature:** > 300 °C (DIN 51794 / ASTM E659)

- **Decomposition temperature:** Not determined.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits (@1013 mbar):

Lower:	2.6 Vol %
Upper:	53.0 Vol %

- **Vapour pressure at 20 °C:** 23 hPa

- **Density at 20 °C:** 1.00 g/cm³ (DIN 51757 / ASTM D1217)

· Solubility in / Miscibility with water:

Fully miscible.

· Viscosity:

Kinematic: Not determined.

- **9.2 Other information:** safety relevant data, which has to be considered as product specifications.

10 Stability and reactivity

- **10.1 Reactivity** None known if used as directed.
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** Reacts with strong acids and 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:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)

GB

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11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Harmful if swallowed.
- **LD/LC50 values relevant for classification:**
> 2000 - < 5000 mg / kg (oral, rat)
> 5,100 mg/m³ 4h (inhalation, rat)

ATE (Acute Toxicity Estimates)

Oral	LD50	7692 mg/kg (rat)
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ethanediol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

- **Primary irritant effect:**
- **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**
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard**
Based on available data, the classification criteria are not met.

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** Easily biodegradable
- **Other information:**
Biodegradation according OECD 301 B; after 10 days: > 60%.
The product is easily biodegradable according to the OECD 301 and 302 guidelines.
- **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 product 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.

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.

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- | | |
|-----------------------------------|--------------------------|
| · European waste catalogue | |
| 12 01 10* | synthetic machining oils |

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

14 Transport information

- | | |
|---|---|
| · 14.1 UN-Number
· ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |
| · 14.4 Packing group
· ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards:
· Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |
| · IATA | IATA Dangerous Goods Regulation (DGR) 56th Edition 2015 |
| · UN "Model Regulation": | - |

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:** no further regulations.
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**
This preparation does not contain any SVHC ("Substances of Very High Concern")
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

- **Regulations / approvals / listings:**

Information on REACH registration numbers in section 3:

In case of lack of REACH registration numbers on mentioned hazardous substances at the end of

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2010, then these numbers will be known and indicated only in section 3 within its tonnage band for registration, after the end of 2013, respectively by the end of 2018, or are exempt from the REACH regulation (e.g. polymers).

- **RoHS:**

The product is compliant with European Directives 2011/65/EC, 2002/95/EC, WEEE 2002/96/EC, 2003/11/EC, 2005/53/EC and RoHS.

The following substances ARE NOT contained:

Pentabromodiphenylether, Octabromodiphenylether, polybrominated diphenylether (PDBE) and / or polybrominated biphenyls (PBB), lead or it's compounds, cadmium or it's compounds, mercury or it's compounds, chromium Cr⁶⁺-compounds.

- **Relevant phrases**

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

- **Department issuing MSDS:** Product Stewardship

- **Editor's notice:**

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties.

- **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

RoHS: Restriction of Hazardous Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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)

VOC: Volatile Organic Compounds (USA, EU)

ISO: International Organisation for Standardisation

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

CLP: Classification, Labeling and Packaging (European GHS)

PBT: Persistent, Bioaccumulative and Toxic chemicals

vPvB: very Persistent and very Bioaccumulative chemicals

Acute Tox. 4: Acute toxicity, Hazard Category 4

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

- *** Data compared to the previous version altered.**

The asterisk (*) on the left side indicate the respective changes from the previous version.