

# SAFETY DATA SHEET



Reiniger ES 3

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

### 1.1 Product identifier

**Product name** : Reiniger ES 3  
**Article No.** : 04680-01

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Industrial use only. Cleaner.
Uses advised against
Consumer use.

### 1.3 Details of the supplier of the safety data sheet

**Manufacturer** : BLASER SWISSLUBE AG  
Winterseistrasse 22  
CH-3415 Hasle-Rüegsau  
Switzerland  
Tel: +41 (0)34 460 01 01  
E-Mail: [contact@blaser.com](mailto:contact@blaser.com)

**e-mail address of person responsible for this SDS** : [reach@blaser.com](mailto:reach@blaser.com)

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

**Telephone number** : 145 (from abroad: +41 44 251 51 51)  
Information: +41 44 251 66 66

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.  
See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

#### Precautionary statements

**Hazardous ingredients** : non-ionic surfactants 30% and more

**Supplemental label elements** : EUH210 - Safety data sheet available on request.

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## SECTION 2: Hazards identification

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
2-methylpentane-2,4-diol	REACH #: 01-2119539582-35 EC: 203-489-0 CAS: 107-41-5 Index: 603-053-00-3	≤5	Skin Irrit. 2, H315 Eye Irrit. 2, H319	-	[1] [2]
(2-methoxymethylethoxy) propanol	REACH #: 01-2119450011-60 EC: 252-104-2 CAS: 34590-94-8	≤3	Not classified.  <b>See Section 16 for the full text of the H statements declared above.</b>	-	[2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Avoid breathing vapour or mist. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

## SECTION 4: First aid measures

### 4.2 Most important symptoms and effects, both acute and delayed

#### Over-exposure signs/symptoms

Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.

### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide

### 5.3 Advice for firefighters

Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
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### 6.3 Methods and material for containment and cleaning up

## SECTION 6: Accidental release measures

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 30°C (32 to 86°F). Shelf life: 36 months. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
2-methylpentane-2,4-diol	<b>SUVA (Switzerland, 3/2022).</b> TWA: 10 ppm 8 hours. Form: vapour and aerosols TWA: 49 mg/m <sup>3</sup> 8 hours. Form: vapour and aerosols STEL: 20 ppm 15 minutes. Form: vapour and aerosols STEL: 98 mg/m <sup>3</sup> 15 minutes. Form: vapour and aerosols
(2-methoxymethylethoxy)propanol	<b>SUVA (Switzerland, 1/2021).</b> STEL: 50 ppm 15 minutes. Form: vapour and aerosols STEL: 300 mg/m <sup>3</sup> 15 minutes. Form: vapour and aerosols TWA: 50 ppm 8 hours. Form: vapour and aerosols TWA: 300 mg/m <sup>3</sup> 8 hours. Form: vapour and aerosols

## SECTION 8: Exposure controls/personal protection

### Biological exposure indices

No exposure indices known.

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

No DNELs/DMELs available.

### PNECs

No PNECs available

## 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved before handling this product.

**Respiratory protection** : A respirator is not needed under normal and intended conditions of product use. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	: Liquid.
Colour	: Yellow.
Odour	: Characteristic.
Odour threshold	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Not available.
Flash point	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
pH	: Not applicable.
Viscosity	: Kinematic (40°C): 3.3 mm <sup>2</sup> /s
Solubility in water	: No.
Partition coefficient: n-octanol/ water	: Not applicable.
Vapour pressure	: Not available.
Relative density	: Not available.
Density	: 0.862 g/cm <sup>3</sup> [20°C]
Vapour density	: Not available.
<u>Particle characteristics</u>	
Median particle size	: Not applicable.

### 9.2.1 Information with regard to physical hazard classes

Explosive properties	: Not available.
Oxidising properties	: Not available.

### 9.2.2 Other safety characteristics

Miscible with water	: No.
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## SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Shelf life: 36 months.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: No specific data.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-methylpentane-2,4-diol  (2-methoxymethylethoxy)propanol	LD50 Dermal	Rabbit	8560 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	3700 mg/kg	-
	LC50 Inhalation Vapour	Rat	55 to 60 mg/l	4 hours
	LD50 Dermal	Rat	9500 mg/kg	-
	LD50 Oral	Rat	5135 mg/kg	-

**Conclusion/Summary** : Not available.

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
2-methylpentane-2,4-diol	3700	N/A	N/A	N/A	N/A
(2-methoxymethylethoxy)propanol	5135	9500	N/A	N/A	N/A

#### Irritation/Corrosion

**Conclusion/Summary** : Not available.

#### Sensitisation

**Conclusion/Summary** : Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

**Information on likely routes of exposure** : Not available.

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.
- Inhalation** : No specific data.



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## SECTION 11: Toxicological information

**Skin contact** : No specific data.

**Ingestion** : No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

#### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
(2-methoxymethylethoxy) propanol	EC50 >969 mg/l	Algae	96 hours
	LC50 1919 mg/l	Daphnia	48 hours
	LC50 >10000 mg/l	Fish	96 hours

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
(2-methoxymethylethoxy) propanol	-	93%; 13 day(s)	-

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
(2-methoxymethylethoxy) propanol	0.004	-	Low

### 12.4 Mobility in soil



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## SECTION 12: Ecological information

**Soil/water partition coefficient ( $K_{oc}$ )** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

#### European waste catalogue (EWC)

Waste code	Waste designation
16 03 06	organic wastes other than those mentioned in 16 03 05

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number or ID number</b>	Not regulated.	9006	Not regulated.	Not regulated.
<b>14.2 UN proper shipping name</b>	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	-	-
<b>14.3 Transport hazard class(es)</b>	-	9	-	-

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## SECTION 14: Transport information

14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	Yes.	No.	No.

### Additional information

**ADN** : The product is only regulated as a dangerous good when transported in tank vessels.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments** : Not available.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

#### Other EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

#### Ozone depleting substances (1005/2009/EU)

Not listed.

#### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

#### Persistent Organic Pollutants

Not listed.

#### Seveso Directive

This product is not controlled under the Seveso Directive.

#### National regulations

**VOC content** : Exempt.

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## SECTION 15: Regulatory information

**Hazardous liquids for water** : Class B

**References** : Chemicals Ordinance (ChemO, SR 813.11).  
Chemical Risk Reduction Ordinance (ORRChem, SR 814.81).  
Ordinance on Waste Transportation (VeVa, SR 814.610).  
EU EWC-Stat and List of Waste (LoW).

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

**15.2 Chemical safety assessment** : No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

✓ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
N/A = Not available  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number  
SGG = Segregation Group  
vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

### Full text of abbreviated H statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.

### Full text of classifications [CLP/GHS]

Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2

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**Version** : 1.02

**Responsible name** : Product Stewardship Blaser Swissslube AG

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## SECTION 16: Other information

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.