

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

- **1.1 Product identifier**
- **Trade name: Enteiser**
- **UFI: 9A05-S0DE-500K-FVFF**
- **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** Auxiliary
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Pramol-Chemie AG
Industriestrasse 3
CH-9602 Bazenheid/SG
Tel +41 71 931 70 30
Fax +41 71 931 44 54
- **Further information obtainable from:**
Abteilung für Produktsicherheit
info@pramol.com
Tel. 071 931 70 30
- **1.4 Emergency telephone number:**
Centre suisse d'information toxicologique, Zurich
+41 (0)44 251 51 51 ou 145 (depuis la Suisse)
Schweizerisches Toxikologisches Informationszentrum, Zürich
+41 (0)44 251 51 51 oder aus der Schweiz: Tel 145
Centro Svizzero d'informazione tossicologica
+41 (0)44 251 51 51 o dalla Svizzera: Tel 145

SECTION 2: Hazards identification

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



flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms** GHS02, GHS07, GHS08
- **Signal word** Danger
- **Hazard-determining components of labelling:**
propan-2-ol
ethanediol
- **Hazard statements**
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.

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*H336 May cause drowsiness or dizziness.**H373 May cause damage to organs through prolonged or repeated exposure.***Precautionary statements***P280 Wear eye protection / face protection.**P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

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

CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25	<i>propan-2-ol</i> ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	50-100%
CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28	<i>ethanediol</i> ⚠ STOT RE 2, H373; ⚠ Acute Tox. 4, H302	20-25%

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:***Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.***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. If symptoms persist, consult a doctor.***After swallowing:** 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.***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.

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SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

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.

· Information about storage in one common storage facility: Not required.

· Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Storage class: 3

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

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

67-63-0 propan-2-ol

WEL Short-term value: 1250 mg/m³, 500 ppm

Long-term value: 999 mg/m³, 400 ppm

107-21-1 ethanediol

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

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

Sk *particulate **vapour

· DNELs

67-63-0 propan-2-ol

Oral DNEL long term systemic effects 26 mg/kg bw/day (general population)

Dermal DNEL long term systemic effects 319 mg/kg bw/day (general population)

888 mg/kg bw/day (workers)

Inhalative DNEL long term systemic effects 89 mg/m³ (general population)

500 mg/m³ (workers)

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107-21-1 ethanediol

Dermal	DNEL long term systemic effects	53 mg/kg bw/day (general population) 106 mg/kg bw/day (workers)
Inhalative	DNEL long term systemic effects	mg/m ³ (general population) 35 mg/m ³ (workers)
	DNEL short term local effects	7 mg/m ³ (general population)

· **PNECs****67-63-0 propan-2-ol**

PNEC	140.9 mg/l (intermittent release) 2,251 mg/l (sewage plant)
PNEC aqua	140.9 mg/l (fresh water) 140.9 mg/l (sea water)
PNEC sediment	552 mg/kg (fresh water) 552 mg/kg (sea water)
PNEC ground	28 mg/kg (ground)

107-21-1 ethanediol

PNEC	10 mg/l (intermittent release) 199.5 mg/l (sewage plant)
PNEC aqua	10 mg/l (fresh water) 1 mg/l (sea water)
PNEC sediment	20.9 mg/kg (fresh water)
PNEC ground	1.53 mg/kg (ground)

· **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.· **Individual protection measures, such as personal protective equipment**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.· **Hand protection** Not required.· **Material of gloves**

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**

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

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· <i>Physical state</i>	<i>Fluid</i>
· <i>Colour:</i>	<i>Blue</i>
· <i>Odour:</i>	<i>Characteristic</i>
· <i>Odour threshold:</i>	<i>Not determined.</i>
· <i>Melting point/freezing point:</i>	<i>Undetermined.</i>
· <i>Boiling point or initial boiling point and boiling range</i>	<i>82 °C</i>
· <i>Flammability</i>	<i>Not applicable.</i>
· <i>Lower and upper explosion limit</i>	
· <i>Lower:</i>	<i>2 Vol %</i>
· <i>Upper:</i>	<i>53 Vol %</i>
· <i>Flash point:</i>	<i>13 °C</i>
· <i>Ignition temperature:</i>	<i>410 °C</i>
· <i>Decomposition temperature:</i>	<i>Not determined.</i>
· <i>pH</i>	<i>Not determined.</i>
· <i>Viscosity:</i>	
· <i>Kinematic viscosity</i>	<i>Not determined.</i>
· <i>Dynamic:</i>	<i>Not determined.</i>
· <i>Solubility</i>	
· <i>water:</i>	<i>Fully miscible.</i>
· <i>Partition coefficient n-octanol/water (log value)</i>	<i>Not determined.</i>
· <i>Vapour pressure at 20 °C:</i>	<i>43 hPa</i>
· <i>Density and/or relative density</i>	
· <i>Density at 20 °C:</i>	<i>0.85 g/cm³</i>
· <i>Relative density</i>	<i>Not determined.</i>
· <i>Vapour density</i>	<i>Not determined.</i>

· 9.2 Other information

· <i>Appearance:</i>	
· <i>Form:</i>	<i>Fluid</i>
· <i>Important information on protection of health and environment, and on safety.</i>	
· <i>Auto-ignition temperature:</i>	<i>Product is not selfigniting.</i>
· <i>Explosive properties:</i>	<i>Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</i>
· <i>Solvent separation test:</i>	
· <i>Organic solvents:</i>	<i>75.0 %</i>
· <i>Water:</i>	<i>0.0 %</i>
· <i>Change in condition</i>	
· <i>Evaporation rate</i>	<i>Not determined.</i>

· Information with regard to physical hazard classes

· <i>Explosives</i>	<i>Void</i>
	<i>Void</i>
· <i>Flammable gases</i>	<i>Void</i>
	<i>Void</i>
· <i>Aerosols</i>	<i>Void</i>
	<i>Void</i>
· <i>Oxidising gases</i>	<i>Void</i>
	<i>Void</i>
· <i>Gases under pressure</i>	<i>Void</i>
	<i>Void</i>
· <i>Flammable liquids</i>	<i>Highly flammable liquid and vapour.</i>
	<i>Void</i>

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· Flammable solids	Void
	Void
· Self-reactive substances and mixtures	Void
	Void
· Pyrophoric liquids	Void
	Void
· Pyrophoric solids	Void
	Void
· Self-heating substances and mixtures	Void
	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
	Void
· Oxidising liquids	Void
	Void
· Oxidising solids	Void
	Void
· Organic peroxides	Void
	Void
· Corrosive to metals	Void
	Void
· Desensitised explosives	Void
	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** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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:**

67-63-0 propan-2-ol		
Oral	LD50	5,280 mg/kg (Rat)
Dermal	LD50	17,600 mg/kg (Rabbit)
107-21-1 ethanediol		
Oral	LD50	5,840 mg/kg (Rat)
Dermal	LD50	9,530 mg/kg (Rabbit)
Inhalative	LC50/4 h	>5 mg/l (Rat)

- **Serious eye damage/irritation** Causes serious eye irritation.
- **STOT-single exposure** May cause drowsiness or dizziness.
- **STOT-repeated exposure** May cause damage to organs through prolonged or repeated exposure.

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· **11.2 Information on other hazards**· **Endocrine disrupting properties**

None of the ingredients is listed.

* **SECTION 12: Ecological information**· **12.1 Toxicity**· **Aquatic toxicity:****67-63-0 propan-2-ol**EC50 (48h) 13,299 mg/l (*Daphnia magna*)LC50 (96h) 9,640 mg/l (*Pimephales promelas*)**107-21-1 ethanediol**EC50 (48h) 41,100 mg/l (*Daphnia magna*)EC50 (24h) >10,000 mg/l (*Daphnia magna*)LC50 (96h) <100 mg/l (*leu*)40,761 mg/l (*Oncorhynchus mykiss*)72,860 mg/l (*Pimephales promelas*)40,761 mg/l (*sal*)EC50 (96h) 6,500-13,000 mg/l (*pseudokirchneriella subcapitata*)· **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**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**· **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.

* **SECTION 13: Disposal considerations**· **13.1 Waste treatment methods**· **Recommendation**

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**· **Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.* **SECTION 14: Transport information**· **14.1 UN number or ID number**· **ADR, IMDG, IATA**

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<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG, IATA 	<p>1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))</p> <p>FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))</p>
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- **14.3 Transport hazard class(es)**
- **ADR, IMDG, IATA**



<ul style="list-style-type: none"> · Class · Label 	<p>3 Flammable liquids.</p> <p>3</p>
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<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	<p>II</p>
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<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: 	<p>No</p>
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<ul style="list-style-type: none"> · 14.6 Special precautions for user · Hazard identification number (Kemler code): · Stowage Category 	<p>Warning: Flammable liquids.</p> <p>33</p> <p>B</p>
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<ul style="list-style-type: none"> · 14.7 Maritime transport in bulk according to IMO instruments 	<p>Not applicable.</p>
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- **Transport/Additional information:**

<ul style="list-style-type: none"> · ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code 	<p>1L</p> <p>Code: E2</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 500 ml</p> <p>2</p> <p>D/E</p>
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<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	<p>1L</p> <p>Code: E2</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 500 ml</p>
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<ul style="list-style-type: none"> · UN "Model Regulation": 	<p>UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)), 3, II</p>
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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
- **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.

· **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)

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)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

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

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.**

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