

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 20.07.2009

Revision: 09.04.2009

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

- **Product details**

- **Trade name:** Instru Zym

- **Application of the substance / the preparation** Instrument cleaner

- **Manufacturer/Supplier:**

Laboratorium Dr. Deppe
Hooghe Weg 35
47906 Kempen

Phone: 0049(0)2152/5565-0

Fax: 0049(0)2152/50849

- **Further information obtainable from:** Abteilung Produktsicherheit

- **Information in case of emergency:**

Tel.: 0049 (0)2152 5565-0

Mo. - Do.: 8:00 - 17:00 Uhr

Fr.: 8:00 - 16:00 Uhr

2 Hazards identification

- **Hazard description:** Not applicable.

- **Information concerning particular hazards for human and environment:**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

















- **GHS label elements** Void

3 Composition/information on ingredients

- **Chemical characterization**

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

- **Dangerous components:**

CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1	ethanediol  Xn; R 22 Warning:  3.1.O/4	10-25%
	Fettalkoholethoxylat  Xn,  Xi; R 22-41 Danger:  3.3/1 Warning:  3.1.O/4	2,5-10%
	Benzyl-C12-16-alkyldimethyl-chlorid  C,  Xn,  N; R 10-22-34-50 Danger:  3.2/1B Warning:  2.6/3;  4.1.A/1;  3.1.O/4	≤ 2,5%
	Protease  Xn,  Xi; R 36/38-42 Danger:  3.4.R/1, 3.2/2, 3.3/2	1 - 5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **General information:** No special measures required.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

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· **After swallowing:** If symptoms persist consult doctor.

5 Fire-fighting measures

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**
 - Dilute with plenty of water.
 - Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling:**
 - **Information for safe handling:** No special measures required.
 - **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

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

107-21-1 ethanediol

IOELV	Short-term value: 104 mg/m ³ , 40 ppm
	Long-term value: 52 mg/m ³ , 20 ppm
	Skin

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves**
 - Natural rubber, NR
 - 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.

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· **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.

9 Physical and chemical properties

· **General Information**

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100°C

· **Flash point:** > 100°C

· **Ignition temperature:** 200°C

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

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

· **Explosion limits:**

Lower:	3,2 Vol %
Upper:	53,0 Vol %

· **Vapour pressure at 20°C:** 23 hPa

· **Density at 20°C:** 1,03 g/cm³

· **Solubility in / Miscibility with water:** Fully miscible.

· **pH-value at 20°C:** 6,5

· **Solvent content:**

Organic solvents:	0,0 %
Water:	70,1 %
VOC (EC)	0,00 %

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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

· **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

107-21-1 ethanediol

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

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

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· Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information**· General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations**· Product:**

· Recommendation Smaller quantities can be disposed of with household waste.

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

· Land transport ADR/RID (cross-border)

· ADR/RID class: -

· Maritime transport IMDG:

· IMDG Class: -

· Marine pollutant: No

· Air transport ICAO-TI and IATA-DGR:

· ICAO/IATA Class: -

· UN "Model Regulation": -

15 Regulatory information**· Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

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

· Hazard-determining components of labelling:

Protease

· Safety phrases:

2 Keep out of the reach of children.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of soap and water.

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.

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· Relevant R-phrases

- 10 Flammable.
- 22 Harmful if swallowed.
- 34 Causes burns.
- 36/38 Irritating to eyes and skin.
- 41 Risk of serious damage to eyes.
- 42 May cause sensitisation by inhalation.
- 50 Very toxic to aquatic organisms.

· Department issuing MSDS: Abteilung Produktsicherheit**· Contact: Herr Dr. Deppe****· 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)

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

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EU