



Material Safety Data Sheet According to 91/155 EEC

Printing date 14.09.2005

Reviewed on 14.09.2005

* 1 Identification of substance:

- **Product details:** Reagent for water analysis
- **Product name:** Urease 2 - Reagent 10 ml
- **Catalog number:** 459400
- **Supplier:**
Tintometer GmbH
Schleefstraße 8a-12
D - 44287 Dortmund
Made in Germany
- **Informing department:** Department Laboratory
- **Emergency information:**
Poison Center Berlin, Germany
phone: +49(0)30 19240

phone: +49(0)231 94510-0

* 2 Composition/Data on components:

- **Description:** urease glycerol solution
- **Dangerous components:** Void

* 3 Hazards identification

- **Hazard designation:** void
- **Information pertaining to particular dangers for man and environment** void

* 4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** Instantly rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Seek immediate medical advice.
- **The following symptoms may occur:**
After swallowing of large amounts:
sickness
gastric or intestinal trouble
diarrhoea
headache
Dizziness

* 5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **Special hazards caused by the material, its products of combustion or resulting gases:** Nitrogen oxides (NO_x)
- **Protective equipment:** Wear self-contained breathing apparatus.

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- **Additional information**

- Collect contaminated fire fighting water separately. It must not enter drains.
 - Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
 - Ambient fire may liberate hazardous vapours.
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* 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
 - **Measures for environmental protection:** Do not allow product to reach sewage system or water bodies.
 - **Measures for cleaning/collecting:**
 - Dispose of contaminated material as waste according to item 13.
 - Ensure adequate ventilation.
 - Absorb with liquid-binding material (sand, diatomite, universal binders).
 - **Additional information:** No dangerous materials are released.
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* 7 Handling and storage

- **Handling**
 - **Information for safe handling:** No special measures required.
 - **Information about protection against explosions and fires:** No special measures required.
 - **Storage**
 - **Requirements to be met by storerooms and containers:** Store in cool location.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
 - Protect from heat and direct sunlight.
 - Protect from humidity and keep away from water.
 - Protect from the effects of light.
 - **Storage class** Not required.
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* 8 Exposure controls and personal protection

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

Components with limit values that require monitoring at the workplace:	
56-81-5 glycerol	
OES (Great Britain)	Long-term value: 10 mg/m ³

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **Personal protective equipment**

- **General protective and hygienic measures**

- Wash hands during breaks and at the end of the work.
- Do not eat, drink or smoke while working.

- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.

- **Recommended filter device for short term use:** Filter B

- **Protection of hands:** Preventive skin protection by use of skin-protecting agents is recommended.

- **Material of gloves**

- nitrile rubber, NBR
- Recommended thickness of the material: ≥ 0.11 mm

- **Penetration time of glove material**

- The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Value for the permeation: Level ≥ 6 (480 min)

- **Eye protection:** Safety glasses

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- **Body protection:** Protective work clothing.

* 9 Physical and chemical properties:

· Form:	Fluid
· Colour:	Colourless
· Odour:	Recognizable
· Melting point/Melting range:	Not determined
· Boiling point/Boiling range:	Not determined
· Flash point:	Not applicable
· Danger of explosion:	Product is not explosive.
· Density at 20°C	1.1-1.3 g/cm ³
· Solubility in / Miscibility with Water:	Fully miscible
· pH-value at 20°C:	6.0-7.0
· Solvent content:	
Organic solvents:	0.0 %
· Solids content:	1.0 %

* 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
 - **Materials to be avoided:** oxidizing agents
 - **Dangerous products of decomposition:** see chapter 5
 - **Additional information:** brennbar, hygroskopisch
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* 11 Toxicological information

- **Acute toxicity:** Quantitative data on the toxicity of the preparation are not available.

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

9002-13-5 Urease

Oral	LD50	12600 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritant effect.
- **Sensitization:** Sensitization possible by inhalation.
- **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EC 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 according to our experience and the information provided to us.

The usual precautionary measures should be adhered to general rules for handling chemicals.

12 Ecological information:

- **Information about elimination (persistence and degradability):**
- **Other information:** Quantitative data on the ecological effect of this product are not available.

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- **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 bodies or sewage system.
 Must not reach sewage water or drainage ditch undiluted or unneutralized.

* 13 Disposal considerations

- **Product:**

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

- **European waste catalogue**

16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
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- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

* 14 Transport information

- **Land transport ADR/RID (cross-border)**

- **ADR/RID-GGVS/E Class:** -

- **Maritime transport IMDG:**

- **IMDG Class:** -

- **Marine pollutant:** No

- **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** -

- **Transport/Additional information:** Not dangerous according to the above specifications.

* 15 Regulatory information

- **Designation according to EC guidelines:**

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

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** Technical Department

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