

WTW Safety Data Sheet
According to EC Directives 91/155/EEC

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

Product name:

Reagent B / hydrolysis reagent

Ord. No.: 821 098
Model: RB/P511

Manufacturer:

WTW Wissenschaftlich-Technische Werkstätten GmbH, Dr.-Karl-Slevogt-Straße 1, D-82362 Weilheim, Germany, Tel.: +49(0)881 183-0, Fax.: +49(0)881 183-420

Emergency telephone:
(001)-703-527-3887

2. Composition/information on ingredients

Chemical characterization: Aqueous acid solution

Hazardous ingredients: Sulphuric acid

Hazard symbols: Corrosive (C)
R-phrases: 35
Content: 3,6 %
CAS-No.: 7664-93-9
EG-Index-No.: 016-020-00-8
EINECS-and EG-No.: 231-639-5

3. Hazards identification

No hazardous product

4. First aid measures

After inhalation: Fresh air

After skin contact: Wash off with plenty of water.
Remove contaminated clothing.

After eye contact: Rinse out with plenty of water with the eyelid held wide open. Summon eye specialist.

After ingestion: Make injured person drink plenty of water.
(if necessary several liters)
Immediately summon doctor.

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5. Fire-fighting measures

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| <i>Suitable extinguishing media:</i> | Water, CO ₂ , foam, powder |
| <i>Unsuitable extinguishing media:</i> | No information available |
| <i>Special risks:</i> | Development of hazardous gases and vapours possible in the event of fire (sulfur oxides). Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus. |
| <i>Other information</i> | Generation of hydrogen is possible by contact with metals. Danger of explosion. |

6. Accidental release measures

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| <i>Personal-related precautionary measures:</i> | Do not inhale vapours/aerosols. Avoid contact with eyes and skin. |
| <i>Environmental-protection measures:</i> | Do not allow to enter sewerage system. |
| <i>Procedures for cleaning/absorption:</i> | Take up with liquid-absorbent material. Forward for disposal. Clean up affected area with water. |

7. Handling and storage

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| <i>Handling:</i> | No further requirements |
| <i>Storage:</i> | Tightly closed at room temperature. |

8. Exposure control/personal protection

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| <i>Specific control parameters:</i> | MAK-value (Germany): 0.1 mg/m ³ for sulphuric acid Class. pregnancy C |
| Personal protective equipment | |
| <i>Respiratory protection:</i> | Required when vapours are generated. |
| <i>Eye protection:</i> | Protective glasses |
| <i>Hand protection:</i> | Gloves (nitrile rubber) |
| <i>Industrial hygiene:</i> | Wash hands and face after working with solution. Change contaminated clothing. |

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9. Physical and chemical properties

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|---|----------------------------|-------------------------|
| <i>Form:</i> Liquid | <i>Colour:</i> Colourless | <i>Odour:</i> Odourless |
| <i>pH-value</i> | 0.1 to 0.2 at 25°C | |
| <i>Melting temperature:</i> | °C | |
| <i>Boiling temperature:</i> | °C | |
| <i>Ignition temperature:</i> | °C | |
| <i>Flash point:</i> | °C | |
| <i>Explosion limite lower:</i> | / | |
| <i> upper:</i> | / | |
| <i>Density:</i> | ca. 1,02 g/cm ³ | |
| <i>Solubility in water:</i> | miscible | |
| <i>Thermal decomposition:</i> | / | |

10. Stability and reactivity

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| <i>Conditions to be avoided:</i> | Strong heating |
| <i>Substances to be avoided:</i> | Metals, alkalies and bases |
| <i>Hazardous decomposition products:</i> | Not known |
| <i>Further information:</i> | None |

11. Toxicological information

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| <i>Acute toxicity:</i> | LD 50 (oral, rat): 2140 mg/kg for sulphuric acid |
| <i>Further toxicological information:</i> | After inhalation of vapours: damage of the affected mucous membranes. After skin contact: severe burns. After eye contact: burns, corneal lesions, risk of serious damage to eyes. After swallowing: risk of perforation, nausea, vomiting, and diarrhoea. After a latency period of several weeks possibly pyloric stenosis. |

12. Ecological information

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| <i>Ecotoxic effects:</i> | Toxic for aquatic organisms due to pH-shift. Caustic even in diluted form. Toxic effect on fish and algae. Do not allow to enter drinking water supplies, waste water or soil. |
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13. Disposal considerations

Products: There are no uniform regulations for the disposal of chemicals or residues. The disposal is regulated through corresponding regional laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.

Packaging: Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, noncontaminated packaging may be treated like household waste or recycled.

14. Transport information

ADR/GGVSE: UN 3264, Ätzender, saurer, anorganischer, flüssiger Stoff, N.A.G. (Schwefelsäurelösung), 8 III
IMDG/GGVSee: UN 3264, Corrosive liquid, acidic, inorganic, n.o.s. (Sulphuric acid solution), 8 III, EmS-No.: F-A, S-B
ICAO/IATA: UN 3264, Corrosive liquid, acidic, inorganic, n.o.s. (Sulphuric acid solution), 8 III
Further information: None

15. Regulatory information

Labelling according to EC directives

Symbol: No hazardous product
R-phrases: /
S-phrases: /

German regulations

Water pollution class; WGK: 1 slightly polluting substance
Storage class: 8 B
Regulation on combustible liquids; VbF: Aqueous solution, non-combustible.
Other regulations: None

16. Other information

Date of issue: 20.05.2008
Supersedes edition of: First edition
Reason for alteration: First edition

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.