

Material Safety Data Sheet
According to 91/155 EEC

Printing date 11.10.2006

Reviewed on 11.10.2006

*** 1 Identification of substance:**

- **Product details:** Reagent for water analysis
- **Product name:** Buffer solution pH 4.00 (25°C) / N.I.S.T
- **Catalog number:** 721247, 721250-4, 721252
- **Supplier:**
Tintometer GmbH
Division AQUALYTIC®
Schleefstr. 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 94510-755
e-mail: sales@aqualytic.de**2 Composition/Data on components:**

- **Chemical characterization:**
- **CAS No. Designation:**
7732-18-5 water, distilled, conductivity or of similar purity
- **Identification number(s):**
- **EINECS Number:** 231-791-2

*** 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.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes (at least 10 min) under running water.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
In case of persistent symptoms consult doctor.

*** 5 Fire fighting measures**

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**
Ambient fire may liberate hazardous vapours.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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Collect contaminated fire fighting water separately. It must not enter drains.

* 6 Accidental release measures

- **Person-related safety precautions:** Use breathing protection against the effects of fumes/dust/aerosol.
- **Measures for environmental protection:** Dilute with much water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, universal binders).
Dispose of contaminated material as waste according to item 13.
- **Additional information:** No dangerous materials are released.

* 7 Handling and storage

- **Handling**
- **Information for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** The product is not flammable
- **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.

* 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:** Not required.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to general rules for handling chemicals.
- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
- **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** Value for the permeation: Level ≥ 6 (480 min)
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

- | | |
|---------------------------------------|----------------|
| · Form: | Fluid |
| · Colour: | Red |
| · Odour: | Odourless |
| · Melting point/Melting range: | 0°C |
| · Boiling point/Boiling range: | 100°C |
| · Flash point: | Not applicable |

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· Danger of explosion:	Product is not explosive.
· Vapour pressure at 20°C:	23 hPa
· Density at 20°C	1 g/cm ³
· Solubility in / Miscibility with Water:	Fully miscible
· pH-value at 20°C:	4
· Organic solvents:	0.0 %
· Water:	> 99 %

* 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
 - **Dangerous reactions** No dangerous reactions known
 - **Dangerous products of decomposition:** No dangerous decomposition products known
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* 11 Toxicological information

- **Acute toxicity:** Quantitative data on the toxicity of the preparation are not available.
 - **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** Irritant effect.
 - **Sensitization:** No sensitizing effect known.
 - **Additional toxicological information:**
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.
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* 12 Ecological information:

- **Information about elimination (persistence and degradability):**
 - **Other information:** Quantitative data on the ecological effect of this product are not available.
 - **General notes:** Preparation: Generally not hazardous for water.
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* 13 Disposal considerations

- **Product:**
- **Recommendation**
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

· European waste catalogue

16 05 09 discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.
 - **Recommended cleaning agent:** Water, if necessary with cleaning agent.
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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.
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*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).
 - National regulations
 - Information about limitation of use: Not required.
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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.
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