

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 N 501

Ord. No.: 830 067

Model: MVR/N 501

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: o-Phosphoric acid

Hazard symbols: Corrosive (C)

R-phrases: 34

Content: 13 %

CAS-No.: 7664-38-2

EC-Index-No.: 015-011-00-6

3. Hazards identification

Irritating to eyes and skin.

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. Immediately summon eye specialist.

After ingestion: Drink plenty of water. (if necessary several litres)
Avoid vomiting. Risk of perforation. Immediately summon doctor.

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5. Fire-fighting measures

<i>Suitable extinguishing media:</i>	To suit environment.
<i>Unsuitable extinguishing media:</i>	No information available.
<i>Special risks:</i>	Generation of hydrogen is possible by contact with metals. Danger of explosion. Development of hazardous vapours possible in the event of fire: Phosphorus oxides
<i>Other information:</i>	Non-combustible. Use suitable chemical protection clothing and selfcontained breathing apparatus in dangerous zone.

6. Accidental release measures

<i>Personal-related precautionary measures:</i>	Avoid contact with eyes and skin. Do not inhale vapours.
<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

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

8. Exposure control/personal protection

<i>Specific control parameters:</i>	EC	Name: ortho phosphoric acid Value: 1 mg/m ³
Personal protective equipment		
<i>Respiratory protection:</i>		Required when vapours/aerosols 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.

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9. Physical and chemical properties

<i>Form:</i> Liquid	<i>Colour:</i> Colourless	<i>Odour:</i> Odourless
<i>pH-value</i>	< 0,5 at 25°C	
<i>Melting temperature:</i>	°C	
<i>Boiling temperature:</i>	about 100°C	
<i>Ignition temperature:</i>	°C	
<i>Flash point:</i>	°C	
<i>Explosion limite lower:</i>	/	
<i> upper:</i>	/	
<i>Density:</i>	/	
<i>Solubility in water:</i>	miscible	
<i>Thermal decomposition:</i>	/	

10. Stability and reactivity

<i>Conditions to be avoided:</i>	Strong heating
<i>Substances to be avoided:</i>	Bases, metals, metallic oxides Hydrogen may form upon contact with metals.
<i>Hazardous decomposition products:</i>	Strong heating causes development of phosphorus oxides.
<i>Further information:</i>	None

11. Toxicological information

<i>Acute toxicity:</i>	LD50 (oral,rat): 1530 mg/kg for pure phosphoric acid
<i>Further toxicological information:</i>	After skin contact: irritant and caustic effects After eye contact: conjunctivitis, burns After ingestion: burns, strong pain (risk of perforation), shock, spasm.

12. Ecological information

<i>Ecotoxic effects:</i>	Toxic for aquatic organisms. Caustic even in diluted form. Harmful effect due to pH-shift. Depending on the concentration, phosphorus compounds may contribute to the eutrophication of water supplies.
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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 1805 Phosphorsäure, flüssig, 8 III

IMDG/GGVSee: UN 1805 Phosphoric acid, 8 III
EmS-No.: F-A, S-B

ICAO/IATA: UN 1805 Phosphoric acid

Further information: None

15. Regulatory information

Labelling according to EC directives

Symbol: Irritant (Xi)
R-phrases: 36/38 Irritating to eyes and skin
S-phrases: 1/2-26-45 Keep locked up and out of reach of children.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

German regulations

Water pollution class; WGK: 1 Slightly polluting substance.
Storage class VCI: 8 B
Regulation on combustible liquids; VbF: Non-combustible
Other regulations: None

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16. Other information

Date of issue:	15.07.2006
Supersedes edition of	23.02.2004
Reason for alteration:	General update

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.