

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

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

*Product name:*

**Nitrate Standard Solution for Direct Calibration: 500 mg/l NO<sub>3</sub>-N**

**Ord. No.: 107 034**  
**Model: ES/NO<sub>3</sub>\_ISA-500**

*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 saline solution

*Hazardous ingredients:* Sodium nitrate  
*Hazard symbols:* Oxidizing (O) and harmful (Xn)  
*R-phrases:* 8-22-36  
*Content:* 0,3 %  
*CAS-No.:* 7631-99-4  
*EG-No.:* 231-554-3

**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.  
*After ingestion:* Drink plenty of water. Induce vomiting.  
Immediately consult 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>                  | Development of nitrous gases possible in the event of fire. |
| <i>Other information:</i>              | None                                                        |

### 6. Accidental release measures

|                                                 |                                    |
|-------------------------------------------------|------------------------------------|
| <i>Personal-related precautionary measures:</i> | None                               |
| <i>Environmental-protection measures:</i>       | None                               |
| <i>Procedures for cleaning/absorption:</i>      | Clean up affected area with water. |

### 7. Handling and storage

|                  |                          |
|------------------|--------------------------|
| <i>Handling:</i> | No further requirements. |
| <i>Storage:</i>  | Tightly closed           |

### 8. Exposure control/personal protection

|                                     |                                         |
|-------------------------------------|-----------------------------------------|
| <i>Specific control parameters:</i> | None                                    |
| Personal protective equipment       |                                         |
| <i>Respiratory protection:</i>      | None                                    |
| <i>Eye protection:</i>              | Protective glasses                      |
| <i>Hand protection:</i>             | Gloves (nitrile rubber)                 |
| <i>Industrial hygiene:</i>          | Wash hands 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>                | 6-8 25°C                    |                         |
| <i>Melting temperature:</i>    | about 0°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>                | about 1,0 g/cm <sup>3</sup> |                         |
| <i>Solubility in water:</i>    | miscible                    |                         |
| <i>Thermal decomposition:</i>  | for sodium nitrate > 380°C  |                         |

## 10. Stability and reactivity

|                                          |                                 |
|------------------------------------------|---------------------------------|
| <i>Conditions to be avoided:</i>         | Do not evaporate the solution.  |
| <i>Substances to be avoided:</i>         | Reducing agents.                |
| <i>Hazardous decomposition products:</i> | Nitrous gases after evaporation |
| <i>Further information:</i>              | None                            |

## 11. Toxicological information

|                                           |                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Acute toxicity:</i>                    | LD 50 (oral, rat): 1267 mg/kg for sodium nitrate                                                                                                                                                                                                                                                     |
| <i>Further toxicological information:</i> | Sodium nitrate is very low toxic. After ingestion: mucosal irritation, nausea, vomiting, diarrhoea. After absorption of large quantities: methaemoglobinaemia with head-ache, cardiac-arrhythmia, drop in blood pressure, dyspnoea and spasms, Key symptom: cyanosis (blue colouration of the blood) |

## 12. Ecological information

|                          |                                                                                 |
|--------------------------|---------------------------------------------------------------------------------|
| <i>Ecotoxic effects:</i> | Sodium nitrate may contribute to the eutrophication of drinking-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

Not subject to transport regulations.

## 15. Regulatory information

Labelling according to EC directives

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

German regulations

*Water pollution class;* Nonpolluting substance  
*Storage class VCI:* 5.1 B  
*Regulation on combustible liquids;* VbF: /  
*Other regulations:* None

## 16. Other information

Date of issue: 15.07.2006  
Supersedes edition of 22.01.2004  
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.