

## Material Safety Data Sheet

According to 91/155 EEC

Reviewed on 23.02.2005

### \* 1 Identification of substance:

- **Product details:** Reagent for water analysis
- **Product name:** Ntot1 TC (LR) LR Set 0-25 mg/l Part 1/2 (Vario Total Nitrogen Reagent A)
- **Catalog number:** 251 995      **Model:** Ntot1 TC (LR)
- **Supplier:**  
WTW Wissenschaftlich-Technische Werkstätten GmbH  
Dr.-Karl-Slevogt-Straße 1  
D-82362 Weilheim      Tel.: +49(0)881 183-0      Internet: <http://www.WTW.com>  
Fax: +49(0)881 183-420      Tel.: +49(0)881 183-100      E-Mail: [Info@WTW.com](mailto:Info@WTW.com)
- **Emergency information:**  
Poison Center Berlin, Germany  
Tel.: +49(0)30 19240

### 2 Composition/Data on components:

- **Chemical characterization:**
- **CAS No. Designation:**  
7681-57-4 disodium disulphite
- **Identification number(s):**
- **EINECS Number:** 231-673-0
- **EC Number:** 016-063-00-2

### \* 3 Hazards identification

- **Hazard designation:**



Xn Harmful

- **Information pertaining to particular dangers for man and environment**  
R 22 Harmful if swallowed.  
R 31 Contact with acids liberates toxic gas.  
R 41 Risk of serious damage to eyes.

### \* 4 First aid measures

- **General information**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact**  
Instantly wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact**  
Rinse opened eye for several minutes under running water.  
Call a doctor immediately.

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**Product name: Ntot1 TC (LR) LR Set 0-25 mg/l Part 1/2 (Vario Total Nitrogen Reagent A)**

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**· After swallowing**

Drink copious amounts of water, induce vomiting.  
Instantly call for doctor.

**· The following symptoms may occur:**

after swallowing:

irritation

allergic reactions

Profuse sweating

after inhalation:

coughing

mucous membrane irritation

breathing difficulty

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### \* 5 Fire fighting measures

**· Suitable extinguishing agents**

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.  
Use fire fighting measures that suit the environment.

**· Special hazards caused by the material, its products of combustion or resulting gases:**

Formation of toxic gases is possible during heating or in case of fire.

Sulphur oxides (SO<sub>x</sub>)

**· Protective equipment:**

Wear full protective suit.

Wear self-contained breathing apparatus.

**· Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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

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### \* 6 Accidental release measures

**· Person-related safety precautions:**

Put on breathing apparatus.

Wear protective equipment. Keep unprotected persons away.

Avoid causing dust.

**· Measures for environmental protection:** Do not allow product to reach sewage system or water bodies.**· Measures for cleaning/collecting:**

Collect mechanically.

Ensure adequate ventilation.

Dispose of contaminated material as waste according to item 13.

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### \* 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:**

Do not store together with acids.

Store away from oxidizing agents.

**· Further information about storage conditions:**

Store under dry conditions.

Protect from humidity and keep away from water.

Protect from the effects of light.

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(Vario Total Nitrogen Reagent A)

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· Storage class Not required.

### \* 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:**

7681-57-4 disodium disulphite (90-100%)

OES | Long-term value: 5 mg/m<sup>3</sup>· **Additional information:** The lists that were valid during the compilation were used as basis.· **Personal protective equipment**· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes.

· **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.· **Recommended filter device for short term use:** Filter P1· **Protection of hands:**

Only use chemical-protective gloves with CE-labelling of category III.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

After use of gloves apply skin-cleaning agents and skin cosmetics.

· **Material of gloves**

nitrile rubber, NBR

Recommended thickness of the material:  $\geq 0.11$  mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**Value for the permeation: Level  $\geq 6$  (480 min)

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Tightly sealed safety glasses.· **Body protection:** Protective work clothing.

### \* 9 Physical and chemical properties:

· <b>Form:</b>	Powder
· <b>Colour:</b>	Colourless
· <b>Odour:</b>	Pungent
· <b>Melting point/Melting range:</b>	150°C
· <b>Boiling point/Boiling range:</b>	Not applicable
· <b>Flash point:</b>	Not applicable
· <b>Inflammability (solid, gaseous)</b>	Product is not inflammable.
· <b>Danger of explosion:</b>	Product is not explosive.
· <b>Density at 20°C</b>	1.48 g/cm <sup>3</sup>
· <b>Settled apparent density at 20°C</b>	1100-1200 kg/m <sup>3</sup>
· <b>Solubility in / Miscibility with</b>	
<b>Water at 20°C:</b>	650 g/l
· <b>pH-value (50 g/l) at 20°C:</b>	4.5
· <b>Organic solvents:</b>	0.0 %

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<b>· Solids content:</b>	100.0 %
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### \* 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** strong heating
- **Materials to be avoided:**
  - oxidizing agents
  - > forms heat
  - acids
- **Dangerous reactions** Contact with acids releases toxic gases
- **Dangerous products of decomposition:**
  - Carbon monoxide and carbon dioxide
  - Nitrogen oxides (NOx)
  - Sulphur oxides (SOx)

### \* 11 Toxicological information

· **Acute toxicity:**

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

**7681-57-4 disodium disulphite**

Oral	LD50	1540 mg/kg (rat)
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· **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effect known.

### \* 12 Ecological information:

- **Information about elimination (persistence and degradability):**
- **Other information:** Methods for the determination of biodegradability are not applicable to inorganic substances.
- **Ecotoxicological effects:**

· **Aquatic toxicity:**

**7681-57-4 disodium disulphite**

EC50	89 mg/l/48h (Daphnia magna)
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LC50	150-220 mg/l/96h (Onchorhynchus mykiss)
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· **Additional ecological information:**

· **CSB-value:**

**7681-57-4 disodium disulphite**

COD	0.168 g/g (.)
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· **General notes:**

- Harmful to aquatic organisms
- Water hazard class 1 (German Regulation) (Assessment by list): 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.

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· **European waste catalogue**

16 05 07	discarded inorganic chemicals consisting of or containing dangerous substances
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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:**
- **Marine pollutant:** No
- **Transport/Additional information:** Not dangerous according to the above specifications.

### \*15 Regulatory information

- **Designation according to EC guidelines:**  
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
- **Code letter and hazard designation of product:**  
Xn Harmful
- **Risk phrases:**  
22 Harmful if swallowed.  
31 Contact with acids liberates toxic gas.  
41 Risk of serious damage to eyes.
- **Safety phrases:**  
2 Keep out of the reach of children.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
39 Wear eye/face protection.  
46 If swallowed, seek medical advice immediately and show this container or label.

### 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:** Department TSS, Dr. Manfred Kaul
- **Data compared to the previous version altered.**

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