

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:** Ntot2 (HR) HR Set 10-150 mg/l Part 1/2 (Vario Total Nitrogen Reagent A)
- **Catalog number:** 251 996 **Model:** Ntot2 TC (HR)
- **Supplier:**
WTW Wissenschaftlich-Technische Werkstätten GmbH
Dr.-Karl-Slevogt-Straße 1
D-82362 Weilheim
Fax: +49(0)881 183-420
Tel.: +49(0)881 183-0
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Internet: <http://www.WTW.com>
E-Mail: 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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- **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

* 5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, 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_x)
- **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.

* 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.

* 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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· **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/m³· **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: ≥ 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 ≥ 6 (480 min)

The exact break through 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:

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

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· **Solids content:** 100.0 %

* 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)

· **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)

LC50 150-220 mg/l/96h (Onchorhynchus mykiss)

· **Additional ecological information:**

· **CSB-value:**

7681-57-4 disodium disulphite

COD 0.168 g/g (.)

· **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

· 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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