

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:** NO2-2 TC (Nitrite 101)
- **Catalog number:** 251 994 **Model:** NO2-2 TC
- **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
 Made in Germany
- **Emergency information:**
 Poison Center Berlin, Germany
 Tel.: +49(0)30 19240

* 2 Composition/Data on components:

- **Description:** Mixture of the substances listed below with harmless additions.

- **Dangerous components:**

CAS: 124-04-9 EINECS: 204-673-3 EC Number: 607-144-00-9	adipic acid	☒ Xi; R 36	80-90%
CAS: 121-57-3 EINECS: 204-482-5 EC Number: 612-014-00-X	sulphanilic acid	☒ Xi; R 36/38-43	10-20%
CAS: 1465-25-4 EINECS: 215-981-2	N-2-aminoethyl-1-naphthylamine dihydrochloride	☒ Xi; R 36/38	≤ 2.5%

- **Additional information** For the wording of the listed risk phrases refer to section 16.

* 3 Hazards identification

- **Hazard designation:**



Xi Irritant

- **Information pertaining to particular dangers for man and environment**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 36 Irritating to eyes.

R 43 May cause sensitisation by skin contact.

- **Classification system**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

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* 4 First aid measures

- **After inhalation**
Supply fresh air and call for doctor for safety reasons.
In case of unconsciousness bring patient into stable side position for transport.
- **After skin contact**
Instantly wash with water and soap and rinse thoroughly.
Seek medical treatment.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Induce vomiting and call for medical help.
- **The following symptoms may occur:**
after inhalation:
irritation
coughing
after swallowing:
mucous membrane irritation
- **Danger** risk of skin sensitization

* 5 Fire fighting measures

- **Suitable extinguishing agents** 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.
nitrous gases
Sulphur oxides (SOx)
combustible
- **Protective equipment:** 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:**
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:**
Ensure adequate ventilation.
Collect mechanically.
Dispose of contaminated material as waste according to item 13.

* 7 Handling and storage

- **Handling**
- **Information for safe handling:** Keep containers tightly sealed.
- **Information about protection against explosions and fires:** Protect from heat.
- **Storage**
- **Requirements to be met by storerooms and containers:**
Store in cool location.
Unsuitable material for container: steel.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.

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- Store under dry conditions.
 - Protect from humidity and keep away from water.
 - Protect from the effects of light.
 - **Storage class** Not required.
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* 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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **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.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.
 - **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
 - **Recommended filter device for short term use:** Filter P2
 - **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.
 - **Material of gloves**
Natural rubber, NR
nitrile rubber, NBR
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Recommended thickness of the material: ≥ 0.11 mm
 - **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Value for the permeation: Level ≥ 6 (480 min)
 - **Eye protection:** Tightly sealed safety glasses.
 - **Body protection:** Protective work clothing.
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* 9 Physical and chemical properties:

· Form:	Powder
· Colour:	White
· Odour:	Odourless
· Melting point/Melting range:	Not determined
· Boiling point/Boiling range:	265°C
· Flash point:	> 100°C
· Ignition temperature:	405°C
· Self-inflammability:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive.
· Density	Not determined

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· Solubility in / Miscibility with Water:	Soluble
· pH-value (50 g/l) at 20°C:	2.2
· Solvent content:	
Organic solvents:	0.0 %
· Solids content:	100.0 %

* 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
 - **Materials to be avoided:**
 - oxidizing agents
 - alkalis
 - **Dangerous reactions**
 - Reacts with reducing agents
 - Reacts with strong oxidizing agents
 - **Dangerous products of decomposition:** see chapter 5
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* 11 Toxicological information

- **Acute toxicity:** Quantitative data on the toxicity of the preparation are not available.

· LD/LC50 values that are relevant for classification:		
124-04-9 adipic acid		
Oral	LD50	5700 mg/kg (rat)
121-57-3 sulphanilic acid		
Oral	LD50	12300 mg/kg (rat)

- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Irritant effect.
 - **Sensitization:** Sensitization possible by skin contact.
 - **Subacute to chronic toxicity:**
 - CAS 121-57-3:
 - MERCK: Sensitization test (guinea pig): positiv (OECD 406)
 - **Additional toxicological information:**
 - The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
 - Irritant
-

* 12 Ecological information:

- **Information about elimination (persistence and degradability):**
- **Other information:**
 - Quantitative data on the ecological effect of this product are not available.
 - CAS No. 124-04-9: 100% / 28 d
 - CAS 121-57-3: 31% / 28 d

· Behaviour in environmental systems:	
124-04-9 adipic acid	
log P(o/w)	0.093 (25°C) (.)
121-57-3 sulphanilic acid	
log P(o/w)	-2.16 (.)

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· Ecotoxicological effects:
· Aquatic toxicity:
124-04-9 adipic acid

EC50	86 mg/l/48h (Daphnia magna)
LC50	511 mg/l/48h (Leuciscus idus)
	97 mg/l/96h (Pimephales promelas)

121-57-3 sulphanilic acid

EC50	85.7 mg/l/48h (Daphnia magna)
LC50	100.4 mg/l/96h (Pimephales promelas)

· Additional ecological information:
· BSB5-value:
124-04-9 adipic acid

BSB5	0.598 g/g (-)
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· General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system.

* 13 Disposal considerations

· Product:

· Recommendation Hand over to disposers of hazardous waste.

· European waste catalogue

16 05 08	discarded organic 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:

· 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.

* 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:

Xi Irritant

· Hazard-determining components of labelling:

sulphanilic acid

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· Risk phrases:

- 36 Irritating to eyes.
- 43 May cause sensitisation by skin contact.

· Safety phrases:

- 24 Avoid contact with skin.
 - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - 37 Wear suitable gloves.
 - 60 This material and its container must be disposed of as hazardous waste.
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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.

· Relevant R-phrases

- 36 Irritating to eyes.
- 36/38 Irritating to eyes and skin.
- 43 May cause sensitisation by skin contact.

· Department issuing data specification sheet: Department TSS, Dr. Manfred Kaul**· Data compared to the previous version altered.**
