



Material Safety Data Sheet

According to 91/155 EEC

Printing date 15.04.2005

Reviewed on 15.04.2005

* 1 Identification of substance:

- **Product details:** Reagent for water analysis
- **Product name:** Dechlor
- **Catalog number:** 00512359, (4)512350, (4)512351
- **Supplier:**
Tintometer GmbH
Schleefstraße 8a-12
D - 44287 Dortmund
Made in Germany
- **Informing department:** Department Laboratory
- **Emergency information:**
Poison Center Berlin, Germany
phone: +49(0)30 19240

phone: +49(0)231 94510-0

* 2 Composition/Data on components:

- **Description:** Preparation contains anorganic compounds.

Dangerous components:

CAS: 7632-00-0	sodium nitrite	T, O, N; R 8-25-50	2.5-5%
EINECS: 231-555-9			
EC Number: 007-010-00-4			

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

* 3 Hazards identification

- **Hazard designation:**



Xn Harmful

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 22 Harmful if swallowed.

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.

* 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.
- Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly.

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- **After eye contact**
Rinse opened eye for several minutes under running water.
Call a doctor immediately.
 - **After swallowing**
Drink copious amounts of water and provide fresh air. Instantly call for doctor.
Induce vomiting.
 - **The following symptoms may occur:**
after inhalation:
coughing
mucous membrane irritation
breathing difficulty
After swallowing of large amounts:
unconsciousness
Cyanosis
Methaemoglobinaemia
sickness
vomiting
 - **Danger**
Danger of system failure.
Danger of disturbed cardiac rhythm.
-

* 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.
Hydrogen chloride (HCl)
nitrous gases
Nitrogen oxides
 - **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:** 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:** Store away from oxidizing agents.
 - **Further information about storage conditions:**
Store under dry conditions.
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Protect from humidity and keep away from water.

This product is hygroscopic.

Protect from the effects of light.

· **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:**

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.

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

· **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.· **Recommended filter device for short term use:** Filter P2· **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

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. 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.

· **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:** Safety glasses· **Body protection:** Protective work clothing.

* 9 Physical and chemical properties:

· Form:	Tablets
· Colour:	White
· Odour:	Odourless
· Melting point/Melting range:	773°C
· Boiling point/Boiling range:	1413°C
· Flash point:	Not applicable
· Self-inflammability:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive.
· Density at 20°C	1.984 g/cm ³
· Settled apparent density at 20°C	~ 1000 kg/m ³
· Solubility in / Miscibility with Water at 20°C:	330 g/l
· pH-value (11.9 g/l) at 20°C:	6.1

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· 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:**
 - acids
 - oxidizing agents
 - > forms heat
- **Dangerous products of decomposition:** see chapter 5

* 11 Toxicological information

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

· LD/LC50 values that are relevant for classification:		
7447-40-7 potassium chloride		
Oral	LD50	2600 mg/kg (rat)
7632-00-0 sodium nitrite		
Oral	LD50	85 mg/kg (rat)
	LDLo	4-6 g (human)

- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effect known.
- **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:
Harmful

* 12 Ecological information:

- **Information about elimination (persistence and degradability):**
- **Other information:**

Methods for the determination of biodegradability are not applicable to inorganic substances.
Quantitative data on the ecological effect of this product are not available.

· Behaviour in environmental systems:	
7447-40-7 potassium chloride	
log P(o/w)	- 0.46 (.)
7632-00-0 sodium nitrite	
log P(o/w)	- 3.7 (.)

- **Ecotoxicological effects:**

· Aquatic toxicity:	
7447-40-7 potassium chloride	
EC50	825 mg/l/48h (Daphnia magna)
LC50	920 mg/l/96h (Gambusia affinis)
7632-00-0 sodium nitrite	
EC50	12.5-100 mg/l/48h (Daphnia magna)

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LC50	360-565 mg/l/48h (Leuciscus idus)
	0.56-1.78 mg/l/96h (Onchorhynchus mykiss)

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): 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.

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:
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:

Xn Harmful

Hazard-determining components of labelling:

sodium nitrite

Risk phrases:

22 Harmful if swallowed.

Safety phrases:

36 Wear suitable protective clothing.
 60 This material and its container must be disposed of as hazardous waste.

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

25 Toxic if swallowed.

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50 Very toxic to aquatic organisms.

8 Contact with combustible material may cause fire.

· **Department issuing data specification sheet:** Technical Department

· *** Data compared to the previous version altered.**

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