

Material Safety Data Sheet

According to 91/155 EEC

Reviewed on 16.02.2005

* 1 Identification of substance:

- **Product details:** Reagent for water analysis
- **Product name:** ECR-Masking RGT
- **Catalog number:** 251 400 **Model:** AI-1 TP
- **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
- **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: 12125-01-8	ammonium fluoride	 T; R 23/24/25	10-20%
EINECS: 235-185-9			
EC Number: 009-006-00-8			

- **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 20/21/22 Harmful by inhalation, in contact with skin and 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.
- **After inhalation**
 Supply fresh air or oxygen; call for doctor.
 In case of unconsciousness bring patient into stable side position for transport.

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- **After skin contact**
Instantly rinse with water.
Instantly wash with polyethylene glycol 400.
Seek immediate medical advice.
 - **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 absorption:
cramps
breathing difficulty
unconsciousness
 - **Danger**
Danger of disturbed cardiac rhythm.
Danger of pulmonary oedema.
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* 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.
ammonia
Nitrogen oxides (NOx)
 - **Protective equipment:**
Wear self-contained breathing apparatus.
Wear full protective suit.
 - **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:** Wear protective equipment. Keep unprotected persons away.
 - **Measures for environmental protection:** Do not allow product to reach sewage system or water bodies.
 - **Measures for cleaning/collecting:**
Neutralize with lime sand, lime or sodium bicarbonate.
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:**
Prevent formation of aerosols.
Keep containers tightly sealed.
 - **Information about protection against explosions and fires:**
Protect from heat.
The product is not flammable
 - **Storage**
 - **Requirements to be met by storerooms and containers:**
Store in cool location.
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Unsuitable material for container: glass

Information about storage in one common storage facility:

Do not store together with acids.

Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed.

Store under dry conditions.

Protect from humidity and keep away from water.

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:
12125-01-8 ammonium fluoride

OES (Great Britain)	Long-term value: 2.5 mg/m ³ as F
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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.

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

Breathing equipment:

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

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

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 through 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: Fluid

Colour: Colourless

Odour: Odourless

Melting point/Melting range: Not determined

Boiling point/Boiling range: 100°C

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· Flash point:	Not applicable
· Self-inflammability:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive.
· Density at 20°C	1.108 g/cm ³
· Solubility in / Miscibility with Water:	Fully miscible
· pH-value at 20°C:	5.1
· Solvent content:	
Organic solvents:	0.0 %
Water:	< 70 %
· Solids content:	< 40 %

* 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
- **Materials to be avoided:**
 - acids
 - halogen compounds
- **Dangerous reactions**
 - Contact with strong acids releases hydrogen fluoride
 - Attacks materials containing glass and silicate
- **Dangerous products of decomposition:**
 - Poisonous gases/vapours
 - Corrosive gases/vapours
 - ammonia
 - Nitrogen oxides (NO_x)

* 11 Toxicological information

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

· LD/LC50 values that are relevant for classification:	
12125-01-8 ammonium fluoride	
LD50 IPR	32 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **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:** Quantitative data on the ecological effect of this product are not available.
- **Ecotoxic effects:**
- **Aquatic toxicity:**
 - Toxic for aquatic organisms

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12125-01-8 ammonium fluoride

LC 50 (NaF) 660 mg/l (Leuciscus idus)

LC50 3638 mg/l/96h (Pimephales promelas)

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 06 laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

Recommended cleaning agent: Water, if necessary with cleaning agent.

14 Transport information
ADR/GGVSE:
IMDG/GGVSee:
EMS-Number:
ICAO/IATA:
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:

ammonium fluoride

Risk phrases:

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Safety phrases:

9 Keep container in a well-ventilated place.

23 Do not breathe fumes/aerosol.

36/37 Wear suitable protective clothing and 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**

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

- **Department issuing data specification sheet:** Department TSS, Dr. Manfred Kaul

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

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