

# SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.0  
Prepared on : 04.03.2026  
Revised on : -

## SECTION 1: Identification of the substance/mixture and of the company/undertaking.

### 1.1 Product identifiers

**Product name** Ammonium Reinecke  
**Product Number** PSR50232  
**Brand** PureSynth research chemicals  
**CAS No.** 13573-16-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

**Company** PureSynth Research Chemicals GmbH  
64683 Einhausen Marie-Curie-Straße. 3, Germany

### 1.4 Emergency telephone number

**Worldwide Helpline No.:** 1800-8908-260

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Acute toxicity, (Category 4) H302: Harmful if swallowed.  
Acute toxicity, (Category 4) H332: Harmful if inhaled.  
Acute toxicity, (Category 4) H312: Harmful in contact with skin.

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

**Pictogram**



**Signal word**

Warning

**Hazard statement(s)**

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

**Precautionary statement(s)**

P261 Avoid breathing dust.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing.  
P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.  
P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

Supplemental Hazard Statements none

### 2.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. May form explosible dust-air mixture if dispersed.

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
Ammonium tetrathiocyanodiammonochromate	C <sub>4</sub> H <sub>10</sub> CrN <sub>7</sub> S <sub>4</sub>	13573-16-5
Component	Classification	Concentration
Ammonium Reinecke	Acute Tox. 4; H302, H332, H312	<= 100 %

## SECTION 4: First aid measures

### Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>If inhaled</b>	After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.
<b>In case of skin contact</b>	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
<b>In case of eye contact</b>	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
<b>If swallowed</b>	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
<b>Most important symptoms and effects, both acute and delayed</b>	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
<b>Indication of any immediate medical attention and special treatment needed</b>	No data available

## SECTION 5: Firefighting measures

<b>Extinguishing media</b>	Water Foam Carbon dioxide (CO <sub>2</sub> ) Dry powder
<b>Suitable extinguishing media</b>	For this substance/mixture no limitations of extinguishing agents are given.
<b>Unsuitable extinguishing media</b>	Carbon oxides Nitrogen oxides (NO <sub>x</sub> ) Sulphur oxides Chromium oxides Combustible.
<b>Special hazards arising from the substance or mixture</b>	Development of hazardous combustion gases or vapours possible in the event

<b>Advice for fire-fighters</b>	of fire. Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
<b>Further information</b>	Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
<b>Environmental precautions</b>	Do not let product enter drains.
<b>Methods and materials for containment and cleaning up</b>	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.
<b>Reference to other sections</b>	For disposal see section 13.

## SECTION 7: Handling and storage

<b>Precautions for safe handling</b>	<b>Advice on safe handling</b> Work under hood. Do not inhale substance/mixture. <b>Hygiene measures</b> Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
<b>Conditions for safe storage, including any incompatibilities</b>	Tightly closed. Dry. Keep locked up or in an area accessible only to qualified or authorised persons. Moisture sensitive
<b>Specific end use(s)</b>	Storage class (TRGS 510): 11: Combustible Solids Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls / Personal protection

<b>Control parameters</b>	Components with workplace control parameters
<b>Exposure controls</b>	
<b>Appropriate engineering controls</b>	No data available
<b>Personal protective equipment:</b>	
<b>Eye / face protection</b>	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses
<b>Skin protection</b>	This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min  Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm

Break through time: 480 min

**Body Protection**

protective clothing

**Respiratory protection**

required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P3  
The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Control of environmental exposure**

Do not let product enter drains.

**SECTION 9: Physical and chemical properties**

<b>Appearance</b>	Form: Powder Colour: Red to Brown
<b>Odour</b>	No data available
<b>pH - Value</b>	No data available
<b>Density</b>	No data available
<b>Boiling Point</b>	No data available
<b>Melting Point</b>	Melting point/ range: 268 - 272 °C - dec.
<b>Solubility in water</b>	No data available
<b>Flash point</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Auto -ignition temperature</b>	No data available
<b>Vapour density</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Partition coefficient: n- octanol / water</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Upper / lower flammability or explosive limits</b>	No data available
<b>Oxidizing properties</b>	No data available

**Other safety information:** No data available

**SECTION 10: Stability and reactivity**

**Reactivity**

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

**Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature).

**Possibility of hazardous reactions**

No data available

**Condition to avoid**

Avoid moisture.

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

In the event of fire: see section 5

## SECTION 11: Toxicological information

<b>Acute toxicity</b>	Oral: No data available LD50 Oral – 500.1 mg/kg LC50 Inhalation - 4 h – 1.5 mg/l - dust/mist LD50 Dermal - 1100 mg/kg
<b>Skin corrosion/irritation</b>	Remarks: No data available
<b>Serious eye damage/eye irritation</b>	Remarks: No data available
<b>Respiratory or skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity - single exposure</b>	No data available
<b>Specific target organ toxicity - repeated exposure</b>	No data available
<b>Aspiration hazard</b>	No data available
<b>Additional Information</b>	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological information

<b>Toxicity</b>	
Toxicity to fish	No data available
Toxicity to daphnia and other aquatic invertebrates	No data available
Toxicity to algae	No data available
Toxicity to bacteria	No data available
<b>Persistence and degradability</b>	
<b>Biodegradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT and vPvB assessment</b>	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
<b>Endocrine disrupting properties</b>	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
<b>Other adverse effects</b>	No data available

## SECTION 13: Disposal considerations

**Waste treatment methods** No data available

## SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>ADR / RID</b>	-	Not dangerous goods	-	-	no
<b>IMDG</b>	-	Not dangerous goods	-	-	no
<b>IATA</b>	-	Not dangerous goods	-	-	no

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### Authorisations and/or restrictions on use

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Ammonium diamminetetakis (thiocyanato-N) chromate (1-)

### 15.2 Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.

### 15.3 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.