

# SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.0  
Prepared on : 14.03.2026  
Revised on : -

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

### 1.1 Product identifiers

**Product name** Flexible conductive silver paste for screen printing  
**Product Number** PSR50287  
**Brand** PureSynth research chemicals  
**CAS No.** NA

### 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-StraBe. 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

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Short-term (acute) aquatic hazard, (Category 1) H400: Very toxic to aquatic life.  
Long-term (chronic) aquatic hazard, (Category 1) H410: Very toxic to aquatic life with long lasting effects.

### 2.2 Label elements

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

#### Pictogram



#### Signal word

Warning

#### Hazard statement(s)

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statement(s)

P273 Avoid release to the environment.  
P391 Collect spillage.  
P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental none

Hazard Statements

### 2.3 Other hazards:

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.

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.

### SECTION 3: Composition / information on ingredients

#### 3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
Ag ink silver ink	-	NA
Component	Classification	Concentration
colloidal silver	Aquatic Acute 1; Aquatic Chronic 1; H400, H410 M-Factor - Aquatic Acute: 1.000 - Aquatic Chronic: 10.000	>= 50 - < 70 %

### SECTION 4: First aid measures

#### Description of first aid measures

<b>General advice</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
<b>If inhaled</b>	After inhalation: fresh air
<b>In case of skin contact</b>	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
<b>In case of eye contact</b>	After eye contact: rinse out with plenty of water. Remove contact lenses.
<b>If swallowed</b>	After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.
<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>	
<b>Suitable extinguishing media</b>	Foam Carbon dioxide (CO2) Dry powder
<b>Unsuitable extinguishing media</b>	For this substance/mixture no limitations of extinguishing agents are given.
<b>Special hazards arising from the substance or mixture</b>	Carbon oxides Silver/silver oxides Mixture with combustible ingredients. Vapours are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.
<b>Advice for fire-fighters</b>	In the event of fire, wear self-contained breathing apparatus.
<b>Further information</b>	Remove container from danger zone and cool with water. 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: Do not breathe vapours, aerosols. Keep away from heat and sources of ignition. 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 with liquid-absorbent material. Dispose of properly. Clean up affected area.
<b>Reference to other sections</b>	For disposal see section 13.

## SECTION 7: Handling and storage

<b>Precautions for safe handling</b>	<p><b>Advice on protection against fire and explosion</b></p> <p>Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.</p> <p><b>Hygiene measures</b></p> <p>Change contaminated clothing. Wash hands after working with substance. For precautions see section 2.2.</p>
<b>Conditions for safe storage, including any incompatibilities</b>	Tightly closed.
<b>Specific end use(s)</b>	Storage class (TRGS 510): 10: Combustible liquids 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>	Ingredients 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>	not required
<b>Body protection</b>	No data available
<b>Respiratory protection</b>	Not required; except in case of aerosol formation.
<b>Control of environmental exposure</b>	Do not let product enter drains.

## SECTION 9: Physical and chemical properties

<b>Appearance</b>	Form: Paste Colour: Silver
<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>	> 100 °C
<b>Solubility in water</b>	No data available
<b>Flash point</b>	90 °C
<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>	Not classified as explosive.
<b>Upper / lower flammability or explosive limits</b>	No data available
<b>Oxidizing properties</b>	none

**Other safety information:** No data available

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.
<b>Chemical stability</b>	The product is chemically stable under standard ambient conditions (room temperature).
<b>Possibility of hazardous reactions</b>	Violent reactions possible with:
<b>Condition to avoid</b>	Strong heating.
<b>Incompatible materials</b>	Strong oxidizing agents
<b>Hazardous decomposition products</b>	In the event of fire: see section 5

## SECTION 11: Toxicological information

<b>Acute toxicity</b>	LD50 Oral - Rat - male and female - > 2000 mg/kg (OECD Test Guideline 401) Remarks: (ECHA) LC50 Inhalation - Rat - male and female - 4 h - > 5.16 mg/l - dust/mist (OECD Test Guideline 436) Remarks: (ECHA) LD50 Dermal - Rat - male and female - > 2000 mg/kg (OECD Test Guideline 402) Remarks: (ECHA)
<b>Skin corrosion/irritation</b>	Skin - Rabbit Result: No skin irritation

	(OECD Test Guideline 404)
<b>Serious eye damage/eye irritation</b>	Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)
<b>Respiratory or skin sensitization</b>	Guinea pig Result: negative (OECD Test Guideline 406) Remarks: (ECHA)
<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. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

## SECTION 12: Ecological information

### Toxicity

Toxicity to fish	semi-static test LC50 - Pimephales promelas (fathead minnow) – 0.0021 mg/l - 96 h Remarks: (ECOTOX Database) flow-through test NOEC - Pimephales promelas (fathead minnow) – 0.00046 mg/l - 34 d Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	semi-static test LC50 - Daphnia magna (Water flea) – 0.00022 mg/l - 48 h Remarks: (ECHA) semi-static test NOEC - Daphnia magna (Water flea) – 0.00016 mg/l - 21 d Remarks: (ECHA)
Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata (green algae) – 0.000285 mg/l - 72 h (OECD Test Guideline 201) Remarks: (ECHA) static test EC10 - Pseudokirchneriella subcapitata (green algae) - 0,000005 mg/l - 72 h (OECD Test Guideline 201) Remarks: (ECHA)
Toxicity to bacteria	No data available
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	No data available
<b>Persistence and degradability</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

<b>Waste treatment methods</b>	No data available
<b>Disposal of Packaging</b>	No data available

### SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>ADR / RID</b>	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (colloidal silver)	9	III	yes
<b>IMDG</b>	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (colloidal silver)	9	III	yes
<b>IATA</b>	3082	Environmentally hazardous substance, liquid, n.o.s. (colloidal silver)	9	III	yes

### 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

##### National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1 ENVIRONMENTAL HAZARDS

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#### 15.2 Chemical safety assessment

No Chemical Safety Assessment

### 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.