

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Name:** Tantalum Sulfide

**CAS #:** 12143-72-5

**Relevant identified uses of the substance:** Scientific research and development

**Supplier details:**

Stanford Advanced Materials

E-mail: [sales@samaterials.com](mailto:sales@samaterials.com)

Tel: (949) 407-8904

Address: 23661 Birtcher Dr., Lake Forest, CA 92630 U.S.A.

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## SECTION 2. HAZARDS IDENTIFICATION

Signal Word: Warning

Hazard Statements: H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335: May cause respiratory irritation

Precautionary Statements: P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P405: Store locked up

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

HMIS Health Ratings (0-4):

Health: 2

Flammability: 1 Physical: 1

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## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Family: Ceramic

Additional Names: Tantalum disulfide

Tantalum sulfide (TaS<sub>2</sub>):

Percentage: 100 wt%

CAS #: 12143-72-5

EC #: 235-265-3

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## **SECTION 4. FIRST AID MEASURES**

General Treatment: Seek medical attention if symptoms persist.

Special Treatment: None

Important Symptoms: None

Inhalation: Remove victim to fresh air. Supply oxygen if breathing is difficult.

Ingestion: Seek Medical Attention.

Skin: Wash affected area with mild soap and water. Remove any contaminated clothing.

Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and

easy to do. Continue rinsing.

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## **SECTION 5. FIREFIGHTING MEASURES**

Flammability: Non-flammable

Extinguishing Media: CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Spec. Fire Fighting Procedure: Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

If Material Is Released/Spilled: Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal.

Take care not to raise dust.

Environmental Precautions: Isolate runoff to prevent environmental pollution.

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## **SECTION 7. HANDLING AND STORAGE**

Handling Conditions: Wash thoroughly after handling.

Storage Conditions: Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.

Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

Ventilation: Provide sufficient ventilation to maintain concentration at or below threshold limit.

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Permissible Exposure Limits: N/A

Threshold Limit Value: N/A

Special Equipment: None

Respiratory Protection: Dust Respirator

Protective Gloves: Rubber gloves

Eye Protection: Safety glasses or goggles

Body Protection: Protective work clothing. Wear close-toed shoes and long sleeves/pants.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Color N/A

Form: Powder, Granules, Pellets, Sputtering target, Custom parts

Odor: Rotten eggs smell

Water Solubility: Insoluble

Boiling Point: N/A

Melting Point: 3000 °C

Flash Point: N/A

Autoignition Temperature: N/A

Density: 6.86 g/cc

Molecular weight: 245.08 g/mol

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## **SECTION 10. STABILITY AND REACTIVITY**

Stability: Stable under recommended storage conditions

Reacts With: Acids, Halogens, Alkali metals, Oxidizing agents

Incompatible Conditions: None

Hazardous Decomposition Products: Hydrogen sulfide, Sulfur oxides, Metal oxide fume

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Potential Health Effects:

Eyes: May cause irritation

Skin: May cause irritation

Ingestion: May cause irritation

Inhalation: May cause irritation

Chronic: N/A

Signs & Symptoms: N/A

Aggravated Medical Conditions: N/A

Median Lethal Dose: N/A

Carcinogen: N/A

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## **SECTION 12. ECOLOGICAL INFORMATION**

Aquatic Toxicity: Low Persistent Bioaccumulation Toxicity: No

Very Persistent, Very Bioaccumulative: No

Notes: N/A

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local, state, national, and international regulations.

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## **SECTION 14. TRANSPORT INFORMATION**

Hazardous: Not hazardous for transportation.

Hazard Class: N/A

Packing Group: N/A

UN Number: N/A

Proper Shipping Name: N/A

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## **SECTION 15. REGULATORY INFORMATION**

Sec 302 Extremely Hazardous: No

Sec 304 Reportable Quantities: N/A

Sec 313 Toxic Chemicals: No

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## **SECTION 16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information 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. It does not represent any guarantee of the properties of the product.