



ELECTRONIC SPACE PRODUCTS INTERNATIONAL

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MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

Trade Name:	Tantalum Silicide	Chemical Family:	Metal
Formula:	TaSi ₂	CAS #:	12039-79-1
Molecular Weight:	104.07		

II HAZARDOUS INGREDIENTS

<u>Hazardous Components</u>	<u>%</u>	<u>OSHA/PEL</u>	<u>ACGIH/TLV</u>
Tantalum Silicide	0-100	5 mg/m ³ as Ta	5 mg/m ³ dust as Ta

III PHYSICAL DATA

Boiling Point 760 mm Hg:	N/A	Melting Point:	2200 °C
Density:	9.145 g/cc	Solubility in H₂O:	Insoluble
Appearance and Odor:	Grey powder, no odor		

IV FIRE AND EXPLOSION HAZARDS DATA

Flash Point (Method Used): Not considered fire hazard under most conditions. **Autoignition Temperature:** No Data

Flammable Limits: Upper: N/A **Lower:** N/A

Extinguishing Media: Use water, carbon dioxide, dry chemical extinguishing agents, dry sand, or dry ground dolomite.

Special Fire Fighting Procedures: No special firefighting procedures needed, use normal procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing, hats, boots and gloves. If without risk remove material from fire area.

V HEALTH HAZARD INFORMATION

Effects of Exposure: Mild (transient) skin irritation. Lung Effects: No specific data available. Generally, insoluble tantalum compounds are not considered inhalation hazards. Animal studies indicate no fibrotic activity from tantalum. Insoluble tantalum compounds are considered practically non-toxic. No data on long term effects.

Medical Conditions Aggravated: None known.

Other Health Hazards: None known.

Most Likely Routes of Entry: Ingestion

EMERGENCY AND FIRST AID PROCEDURES:

EYE: Immediately flush eyes, including under eyelids, with large amounts of water for at least 15 minutes.

SKIN: Remove contaminated clothing, flood skin with large amounts of water. If irritation persists seek medical attention.

INGESTION: Induce vomiting, obtain medical attention.

INHALATION: Remove to fresh air.

VI REACTIVITY DATA

Stability: Stable

Incompatibility (Material to Avoid): None

Hazardous Decomposition Products: None

VII SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material Is Released or Spilled: Vacuum up spill using HEPA filter.

Waste Disposal: In accordance with Local, State and Federal Waste Disposal Regulations.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection: Filter- dust, fume, mist

Protective Gloves: Neoprene

Other: Normal lab wear.

Ventilation: Use with adequate ventilation.

Eye Protection: ANSI approved safety goggles.

IX SPECIAL PRECAUTIONS

Handling and Storage: Keep container tightly closed. Store in a cool, dry, well-ventilated area. Wash thoroughly after

use. Do not breathe dust, vapor, mist or gas.

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ESPI shall not be held liable for any damage resulting from handling or from contact with the above product.

Issued by: S. Dierks
Date: June 1993