



## MATERIAL SAFETY DATA SHEET

COMPLIES WITH 29 CFR 1910.1200.  
OSHA HAZARD COMMUNICATION RULE

Date Revised 9/8/03

### CHEMICAL IDENTITY

LABEL IDENTITY	<b>Tantalum Silicide</b>		
MOLECULAR WEIGHT	<b>237.12</b>		
FORMULA	<b>TaSi<sub>2</sub></b>		
CHEMICAL FAMILY	<b>Metal Silicide</b>		
CAS REGISTRY NUMBER	<b>12039-79-1, LISTED ON TSCA INVENTORY</b>		
HAZARDOUS INGREDIENTS	<b>Tantalum Silicide</b>		
OSHA PEL	ACGIH TLV	OTHER LIMITS	%
<b>5mg(Ta)/m3</b>	<b>5mg (Ta)/m3</b>	<b>NE</b>	<b>0.0 - 100.0</b>
<b>15mg/m3</b>	<b>10mg/m3</b>	<b>10mg/m3 res</b>	<b>0.0 - 100.0</b>

### PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	<b>Gray metallic powder, no odor.</b>
BOILING POINT	<b>NE or NA</b>
VAPOR DENSITY (AIR=1)	<b>No Data</b>
VAPOR PRESSURE (MM HG)	<b>NA</b>
% VOLATILE BY VOLUME (%)	<b>NE or NA</b>
REACTION WITH WATER	<b>ND</b>
EVAPORATION RATE (butyl acetate = 1)	<b>NA</b>
SOLUBILITY IN WATER	<b>Insoluble</b>
MELTING POINT	<b>2100 C</b>
SPECIFIC GRAVITY	<b>9.14</b>
PHYSICAL STATES	<b>Solid</b>

### FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	<b>NE or NA</b>
EXTINGUISHING MEDIA	<b>Use suitable extinguishing material for surrounding materials and type of fire.</b>
SPECIAL FIRE FIGHTING PROCEDURES	<b>Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin &amp; eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.</b>
UNUSUAL FIRE & EXPLOSION HAZARDS	<b>None determined</b>





## TANTALUM SILICIDE MATERIAL SAFETY DATA SHEET

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### SAFE HANDLING AND USE

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: **Wear appropriate respiratory and protective clothing equipment specified below. 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 proper disposal. Take care not to raise dust.**

WASTE DISPOSAL METHOD: **Refer to federal, state & local regulations for proper disposal.**

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### SPECIAL PROTECTIVE INFORMATION

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RESPIRATORY PROTECTION	<b>NIOSH/MSHA approved dust respirator</b>
LOCAL EXHAUST	<b>Maintain exposure at or below PEL, TLV levels</b>
MECHANICAL (general)	<b>Recommended</b>
SPECIAL	<b>None</b>
OTHER	<b>None</b>
PROTECTIVE GLOVES	<b>Impervious gloves, Rubber gloves</b>
EYE PROTECTION	<b>Safety glasses</b>
OTHER PROTECTIVE EQUIPMENT	<b>Protective gear suitable to prevent contamination of skin and clothes</b>
WORK/HYGIENIC/MAINTENANCE	<b>Implement engineering and work practice controls to reduce &amp; maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. 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.</b>

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### SPECIAL PRECAUTIONS

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PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: **Store in cool, dry area. Store in tightly sealed container. Wash thoroughly after handling.**

ADDITIONAL COMMENTS: **Some of the chemicals listed herein are experimental or research substances which may be toxic, as defined by various governmental regulations. In accordance with Environmental Protection Agency regulations and the Toxic Substance Control Act (TSCA), these materials should only be handled by, or under the direct supervision of, a "technically qualified individual", as defined in 40 CFR 710-2 (aa).**

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THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

NA= NOT APPLICABLE

ND= NO DATA FOUND

NE= NOT ESTABLISHED