

Material Safety Data Sheet

Identity: Tantalum carbide

Formula: TaC

SECTION I - GENERAL INFORMATION

Manufacturer: [Stanford Advanced Materials](#) (SAM)

The information below is believed to be accurate and represents the best information available to SAM. However, SAM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Molecular weight: 192.96

CAS #	OSHA PEL	ACGIH TLV	%	Other
12070-06-3	5mg (Ta)/m3	5mg (Ta)/m3	0.0-100%	NE

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 5500.0 °C

Vapor Pressure: NE

Melting Point: 3880.0 °C

Vapor Density: NA

Solubility in water: insoluble

Percent Volatile: NA

Appearance and odor: Black powder, no odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Method Used: Non-Flammable

Explosive Limits: LEL: NA

UEL: NA

Flash Point: NA

Extinguishing Media:

Use: Not applicable. Use suitable extinguishing media for surrounding materials and type of fire.

Special Fire Fighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire and Explosion Hazards: Contact with acids may evolve flammable hydrogen gas.

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid (instability): None

Incompatibility – Materials to avoid: Strong oxidizing agents, acids and bases.

Hazardous Decomposition or Byproducts: Hydrogen gas

Hazardous Polymerization:

Conditions to avoid (hazardous polymerization): None

SECTION VI - HEALTH HAZARD DATA

Routes of entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes

Health Hazards (Acute and Chronic):

Inhalation:

Acute: Powders and dust may cause irritation to the respiratory tract and mucous membranes.

Chronic: No chronic health effects recorded.

Ingestion:

Acute: No acute health effects recorded. *Chronic:*

No chronic health effects recorded. *Skin:*

Acute: Powders or dust may cause abrasive irritation.

Chronic: No chronic health effects recorded.

Eye:

Acute: Powders or dust may cause abrasive irritation.

Chronic: No chronic health effects recorded.

Target Organs: No effects on target organs recorded.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

LD 50/LC50: No toxicity data recorded.

Signs and Symptoms of Exposure:

Inhalation: May cause a red, dry throat, sneezing, coughing and difficulty breathing.

Ingestion: No acute or chronic health effects recorded.

Skin: May cause redness and itching.

Eye: May cause redness, burning, itching and watering.

Medical Conditions Aggravated by Exposure:

Pre-existing respiratory disorders.

Emergency and First Aid Procedures:

Inhalation: Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

Ingestion: Give 1-2 glasses of milk or water and induce vomiting; seek medical attention if symptoms persist. Never induce vomiting or give anything by mouth to an unconscious person.

Skin: Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention immediately.

Eye: Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention immediately.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled:

Wear appropriate respiratory and protective equipment specified in section VIII-Control Measures. Isolate spill area, 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:

Dispose of in accordance with state, local, and federal regulations.

Hazard Label Information:

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling. Use with adequate ventilation

Precautions To Be taken In Handling and Storing: None.

SECTION VIII - CONTROL MEASURES

Protective Equipment Summary (Hazard Label Information):

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent contact.

Ventilation:

Local Exhaust: Local exhaust ventilation may be to control any air contaminants to within their PEL or TLVs during the use of this product.

Mechanical (General): Good general ventilation is recommended.

Other Protective Clothing or Equipment: Protective gear suitable to prevent contamination.

Work/Hygienic/Maintenance Practices:

Implement engineering and work practice controls to reduce and 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 or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established
