

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

| | | | |
|-------------------------|------------------|-----------------|------------|
| Trade Name: | Tantalum Carbide | Synonym: | None known |
| Chemical Family: | Carbide | Formula: | TaC |
| CAS #: | 12070-06-3 | | |

II HAZARDOUS INGREDIENTS

| | | |
|------------------------|---------------------------------------|--|
| Percentage: 100 | PEL: 5 mg/m ³ as Ta | TLV (Units): 5 mg/m ³ dust as Ta |
|------------------------|---------------------------------------|--|

III PHYSICAL DATA

| | | | |
|---------------------------------|-------------------------------|--------------------------------------|---------------|
| Boiling Point 760 mm Hg: | 5500 °C | Freezing/Melting Point: | 38.80 °C |
| Vapor Density: | No data | Vapor Pressure: | Essentially 0 |
| % Volatiles: | 0 | Solubility in H₂O: | Insoluble |
| Appearance and Odor: | Black to grey powder, no odor | Evaporation Rate: | 0 |

IV FIRE AND EXPLOSION HAZARDS DATA

| | |
|---|--|
| Flash Point (Method Used): N/A | 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

| | | |
|--|--|-----------------------|
| OSHA (PEL): 5 mg/m ³ as TA | ACGIH (TLV): 5 mg/m ³ dust as TA | |
| Animal Toxicity: | | |
| LD50: No Data | LC50: No Data | Other: No Data |

Effects of Exposure:

Acute Effects:

Ingestion: None known

Eye Contact: May cause irritation

Skin Contact: May cause skin irritation on contact.

Inhalation: May cause respiratory irritation.

Chronic Effects:

Ingestion: None known

Eye Contact: None known

Other: Details of toxicity are unknown.

Skin Contact: None known

Inhalation: None Known

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. Call a physician.

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

INGESTION: No data available, but one should obtain medical attention.

INHALATION: No specific information available, one should obtain medical attention.

VI REACTIVITY DATA

Stability: Stable

Incompatibility (Material to Avoid): Flammable gases.

Hazardous Decomposition Products: May emit irritating fumes.

Conditions to Avoid: Extremely resistant to chemical action except at elevated temperatures.

Other: May form explosive mixture with gases.

VII SPILL OR LEAK PROCEDURES

RCRA Code: None

TSCA Registered: No

Steps to Be Taken in Case Material Is Released or Spilled: Wearing full protective equipment, cover spill with dry sand or vermiculite. Mix well and carefully transfer to a container.

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

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection: High efficiency particle respirator.

Ventilation: Laboratory fume hood.

Protective Gloves: Rubber.

Eye/Face 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.

Other Precautions: Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower and hygienic facilities for washing.

Transportation Information: Per 49CFR 172.101

Proper Shipping Name: Not regulated

Hazard Classification: None

UN #: None

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