MATERIAL SAFETY DATA SHEET
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 08-04-95

CHEMICAL IDENTITY

LABEL IDENTIY
CHEMICAL NAME/SYNONYMS
FORMULA
CHEMICAL FAMILY
HAZARDOUS INGREDIENTS
TANTALUM CARBIDE
TANTALUM CARBIDE
TaC
METAL CARBIDE
TANTALUM CARBIDE

TANTALUM: %: 53.8 CAS: 7440-25-7 TLV: 5 mg/m3 OSHA/PEL: 5 mg/m3
CARBON: %: 6.2 CAS: 1333-86-4 TLV: 5 mg/m3 OSHA/PEL: 5 mg/m3
(AS CARBIDE)

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR
BOILING POINT
DENSITY (gm/cc)
VAPOR PRESSURE @ 20°
% VOLATILE BY VOLUME (%)
REACTION WITH WATER
EVAPORATION RATE (H2O=1)
SOLUBILITY IN WATER
MELTING POINT
Black-brown powder; odorless
5550
14.48
ND
0
None
ND
Insoluble
3880

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT
AUTOIGNITION TEMPERATURE (°C)
FLAMMABILITY
EXTINGUISHING MEDIA
Dry chemical; (other) limestone
Use dry chemical, CO2, sand graphite-DO
NOT USE WATER ON METAL FIRES!

SPECIAL FIRE FIGHTING PROCEDURES
Wear NIOSH/MSHA approved self-contained
breathing apparatus and full protective
clothing. Do not apply water to burning
material. During a fire, irritating and toxic
gases and aerosols may be generated by
thermal decomposition and combustion.

UNUSUAL FIRE & EXPLOSION HAZARDS
Dust may present a fire or explosion hazard
under favorable conditions. However, this is
not expected to be a problem under normal
handling conditions.
TANTALUM CARBIDE
MATERIAL SAFETY DATA SHEET

HEALTH HAZARD INFORMATION

TOXICITY DATA
No Date on this compound

ROUTES OF ENTRY
INHALATION: Yes
SKIN: Yes
INGESTION: Yes

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:
ND

EFFECTS OF OVEREXPOSURE (acute and chronic):
INHALATION: May cause mild irritation of the nose and throat.
DERMAL/EYE: May cause mild irritation due to abrasive action of the dust.
OTHER: None

CARCINOGENICITY: None  NTP: No  IARC MONOGRAPHS: NO  OSHA REGULATE: NO

EMERGENCY FIRST AID PROCEDURES:
INGESTION: Induce vomiting. Seek medical attention.
INHALATION: Remove to fresh air & administer oxygen if breathing is necessary, seek medical attention.
SKIN CONTACT: Brush material off skin. Wash affected area with soap and water.
EYE CONTACT: Flush eyes for at least 15 minutes with lukewarm water, seek medical.

REACTIVITY DATA

STABILITY
Stable

CONDITIONS CONTRIBUTING TO UNSTABILITY
NA

INCOMPATIBILITY (MATERIALS TO AVOID)
Strong oxidizing materials, strong acids

HAZARDOUS DECOMPOSITION PRODUCTS
Thermal decomposition may produce oxides of carbon, tantalum and other potentially toxic fumes.
Will Not Occur

HAZARDOUS POLYMERIZATION
Will Not Occur

CONDITIONS TO AVOID
Keep away from sparks or ignition sources.
SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
- Wearing full protective clothing, isolate the area and insure proper ventilation.
- Vacuum up spill and place in a container for proper disposal. Keep from entering water or ground water.

WASTE DISPOSAL METHOD:
- May be reclaimed or sold for scrap. Disposal must be in accordance with regulations.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION
- NIOSH/MSHA approved respirator

LOCAL EXHAUST
- Maintain below TLV

MECHANICAL (general)
- Recommended

SPECIAL
- None

OTHER PROTECTIVE EQUIPMENT
- Maintain sink, safety shower and eyewash fountain in the work area. Wear full protective clothing at all times.

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:
- Store in tightly closed containers in a cool, dry place. Wash hands and face thoroughly.

TRANSPORTATION REQUIREMENTS
- DOT CLASS: Not Classified
- UN NUMBER: NC
- IMCO CLASS: NC
- OTHER: ---

PRECAUTIONARY LABELING
- NONE

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NA = NOT APPLICABLE
ND = NO DATA FOUND