

# MATERIAL SAFETY DATA SHEET

24 HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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## SECTION 1 Product Identification

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**CHEMICAL NAME:** Tantalum powder  
**CAS #:** 7440-25-7  
**FORMULA:** Ta

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## SECTION 2 Composition and Information on Ingredients

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INGREDIENT:	CAS #	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	7440-25-7	100	5mg/m3(Ta metal/oxide)	5mg/m3(Ta metal/oxide)

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## SECTION 3 Hazards Identification

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**EMERGENCY OVERVIEW:** May be irritating to the eyes, skin and respiratory tract.  
**PRIMARY ROUTES OF EXPOSURE:** Inhalation (of dust or fume)  
**EYE CONTACT:** The dust may cause slight to mild irritation of the eyes.  
**SKIN CONTACT:** The dust may cause slight to mild irritation of the skin.  
**INHALATION:** May be irritating to nasal cavity and respiratory tract.  
**INGESTION:** No specific information is available on the physiological effects of ingestion.  
**CHRONIC HEALTH EFFECTS:** No information on long term exposure available.  
**ACUTE HEALTH EFFECTS:** Dust may be irritating to skin, eyes and respiratory tract.

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## SECTION 4 First Aid Measures

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**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.

**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

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## **SECTION 5                      Firefighting Measures**

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**FLASH POINT:** none

**AUTO IGNITION TEMPERATURE:** none

**EXPLOSION LIMITS:** none

**EXTINGUISHING MEDIUM:** Dry chemical or Class D metal fire agent

**SPECIAL FIREFIGHTING PROCEDURES:** If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** none

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** Flammable solid. Dust may form explosive mixtures with air. May self ignite if wetted with alcohols or related organics.

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## **SECTION 6                      Accidental Release Measures**

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**SPILL AND LEAK PROCEDURES:** Mix the material with sodium carbonate or dolomite. Sweep up the solid.

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## **SECTION 7                      Handling and Storage**

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**HANDLING AND STORAGE:** Store material in a tightly sealed container.

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## **SECTION 8                      Exposure Controls and Personal Protection**

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**EYE PROTECTION:** Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.

**SKIN PROTECTION:** Chemical-resistant.

**VENTILATION:** If possible, handle the material in an efficient fume hood.

**RESPIRATOR:** If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

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## **SECTION 9                      Physical and Chemical Properties**

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**COLOR AND FORM:** -100 mesh

**MOLECULAR WEIGHT:** 180.95

**MELTING POINT (DEG. C.):** none

**BOILING POINT:** 5425°

**VAPOR PRESSURE:** no data

**SPECIFIC GRAVITY:** 16.6

**SOLUBILITY IN WATER:** insoluble

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## **SECTION 10                    Stability and Reactivity**

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**STABILITY:** air and moisture stable

**HAZARDOUS POLYMERIZATION:** no hazardous polymerization

**CONDITIONS TO AVOID:** none

**INCOMPATIBILITY:** Halogens, strong mineral acids.

**DECOMPOSITION PRODUCTS:** none

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## **SECTION 11 Toxicological Information**

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**RTECS DATA:** Implant (rat); TDLo: 3760 mg/kg

**MUTAGENIC EFFECTS:** no data

**TETRATOGENIC EFFECTS:** no data

**CARCINOGENIC EFFECTS:** no data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

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## **SECTION 12 Ecological Information**

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**ECOLOGICAL INFORMATION:** No information available

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## **SECTION 13 Disposal Considerations**

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**DISPOSAL:** Dispose of in according to local state and federal regulations.

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## **SECTION 14 Transportation Information**

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Metal powder, Flammable, n.o.s., Class 4.1, UN 3089, PG II

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## **SECTION 15 Regulatory Information**

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**TSCA:** Listed in the TSCA inventory

**SARA (TITLE 313):** Not reportable under SARA Title 313

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## **SECTION 16 Other Information**

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