

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

Product Name: Tantalum Powder
CAS#: 7440-25-7
EC Number: 231-135-5
Molecular Formula: Ta
Recommended Use: Scientific research
Uses Advised Against: No information available.

Details of the Supplier:

ADMAT INC

2460 General Armistead Ave. Suite 213

Norristown, PA19403

Phone: (484) 322-2094

www.admatinc.com

Emergency Telephone Number: (484) 322-2094

SECTION 2 – Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS):

Flammable solid, category 1

Label Elements: Flame

Signal Word: Danger

Hazard Statements: H228 Flammable solid.

Precautionary Statements: Keep away from heat, sparks, open flames, and hot surfaces - No smoking. In case of fire, use Class D dry chemical extinguishing agent for extinction.

SECTION 3 – Composition / information on ingredients

Chemical: Tantalum
CAS#: 1314-61-0
EC Number: 231-135-5
Weight %: 100%

SECTION 4 – First-aid measures

Description of first aid measures:

Ingestion: Do Not Induce Vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.

Skin Contact: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Eye Contact: Immediately flush eyes, including under eyelids, with large amounts of water for at least 15 minutes. Seek medication attention.

Inhalation: Remove to fresh air. If required provide artificial respiration. Seek immediate medical attention.

Most important symptoms/effects: No information available

Indication of immediate medical attention and special treatment needed:

No information available.

SECTION 5 – Fire-fighting measures

Suitable extinguishing media:

Use Class D dry powder extinguishing agent.

Unsuitable Extinguishing Media:

Do not use water.

Specific hazards arising from the chemical:

Fine dust dispersed in air may irritate eyes, respiratory system and ignite

Special protective equipment and precautions for fire-fighters:

Wear self-contained respirators and other protective gear which suits the surrounding fire.

SECTION 6 – Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away. Ensure proper ventilation.

Environmental precautions: Do not allow material to be released in to the environment. Do not flush and prevent chemical from entering drains. Consult state, local or federal EPA regulations for proper disposal.

Methods and materials for containment and cleaning up:

Use non-sparking tools. Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

SECTION 7 – Handling and storage

Precautions for safe handling:

Avoid contact with skin and eyes. Do not breathe or ingest dust. Use non-sparking tools and protect from ignition sources.

Conditions for safe storage:

Keep in tightly closed containers. Store in cool, dry and well-ventilated place.

SECTION 8 – Exposure controls/personal protection.

Control parameters:

PEL(USA): 5 mg/m³

TLV(USA): 5 mg/m³

Appropriate engineering controls: Handle powder in a controlled enclosed environment with proper ventilation.

Personal protective equipment:

Eye/face protection: Chemical safety goggles

Skin/body protection: Protective work clothing(wear long sleeve shirt/pants, closed-toed shoes). Rubber gloves.

Respiratory protection: Use properly fitted respirator when working with high concentrations.

Other: When handling do not eat, drink or smoke.

SECTION 9 – Physical and chemical properties

Physical Form:	Powder solid
Color:	Gray
Odor:	Odorless
Odor threshold:	No information available.
Ph value:	Not applicable.
Melting point:	2996°C / 5425°F
Boiling point:	5425 °C
Flash point:	No information available
Evaporation rate:	Not applicable.
Flammability:	Flammable solid.
Flammability or explosive limits:	No information available.
Vapor pressure:	No information available.
Vapor density:	Not applicable.
Relative density:	16.6 g/cc @ 20°C.
Solubility(ies):	Insoluble in water.
Partition coefficient n-octane/water:	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	Not applicable.
Molecular Weight:	No information available.

SECTION 10 – Stability and reactivity

Reactivity:	Not known.
Chemical Stability:	Stabile under recommended conditions.
Possibility of hazardous reactions:	Flammable when exposed to sparks or flames. Reacts with strong oxidizing agents.
Conditions to avoid:	Heat, sparks and flames.
Incompatible materials:	Acids, oxidizing agents, halogens, bromine, trifluoride, fluorine, lead chromate, sulfur trioxide.
Hazardous decomposition products:	Tantalum oxide fumes.

SECTION 11 – Toxicological information

Acute Toxicity:

LD50 Oral: 2000mg/kg (rat).

LD50 Dermal: Not listed.

LC50 Inhalation: 5.18 mg/l (rat).

Route of exposure: Skin, eyes, ingestions.

Symptoms: Coughing and shortness of breath.

Exposure: May cause irritation of skin and eye.

SECTION 12 – Ecological information

Ecotoxicity: Do not empty into drains.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility in the soil: No information available.

Other adverse effects: No information available.

SECTION 13 – Disposal information

Recommendation: Consult state, local or federal EPA regulations for proper disposal.

SECTION 14 – Transportation information

UN number: UN3089

UN proper shipping name: Metal powder, flammable, n.o.s., (Tantalum)

Transport Hazard Class(es): 4.1

Packaging group: II

SECTION 15 – Regulatory information

SARA section 302: Not listed.

SARA section 304: Not applicable.

SARA section 313: Not listed.

SECTION 16 – Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet or in combination with any other product or process, is the responsibility of the user.