

MATERIAL SAFETY DATA SHEET

ADMAT INC

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SECTION 1 - IDENTIFICATION

Product Name: Tantalum
Synonyms: None known
Chemical Family: Metallic element
CAS#: 7440-25-7
Molecular formula: Ta

SECTION 2 - INGREDIENTS

Chemical:	Ta		
CAS#	%	PEL	TLV
7440-25-7	100	5 mG/M ³	5 mG/M ³

SECTION 3 - PHYSICAL DATA

Boiling Point: 5425C
% Volatiles: 0
Solubility in Water: Insoluble
Specific Gravity: 16.6
Freezing/Melting Point: 2996C
Evaporation Rate (butyl acetate = 1): 0
Vapor Density: Not Applicable
Vapor Pressure: Low
Appearance and odor: Grey-black metal, odorless
Other: No data

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point: Not applicable
Flammable Limits in Air, Low: Not applicable

	High:	Not applicable
Auto-ignition Temperature:	Minimum	300C for layer 630 for cloud

Extinguishing Media:

If involved in a fire, do not use water, carbon dioxide, or halogenated extinguishers. Use dry chemical extinguishing agents, dry sand, or dry ground dolomite.

Special Fire Fighting Procedures:

Use normal firefighting 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.

Unusual Fire and Explosion Hazards:

Tantalum in the solid state will not burn. Fine powder, wire, and foil may be a fire hazard, while fine powder dust may be an explosion hazard. When heated, all forms of the metal may react with water or steam to produce explosive hydrogen gas.

SECTION 5 - HEALTH DATA

OSHA (PEL): 5 mG/M³

ACGIH (TLV): 5 mG/M³

A. ANIMAL TOXICITY

LD50: No data

LC50: No data

Other: Implant-rat Tdlo: 3760 mG/KG
Equivocal tumorigenic agent by RTECS criteria

B. EFFECTS OF EXPOSURE**ACUTE EFFECTS****Ingestion:**

None known. Evidence suggests low toxicity potential due to poor absorption.

Skin Contact: Powder or dust may cause irritation.

Eye Contact: Powder or dust may cause irritation.

Inhalation:

Powder or dust may irritate mucous membranes and upper respiratory tract.

Medical Conditions, if any, Aggravated by the Chemical:

Pre-existing respiratory conditions.

Other Health Hazards:None known.

Most Likely Routes of Entry: Ingestion

CHRONIC EFFECTS

Ingestion: None known.

Skin Contact:None known.

Eye Contact: None known.

Inhalation:

Tantalum dust has caused transient inflammatory lesions in the lungs of animals.

Other: Equivocal tumorigenic agent by RTECS criteria.

Carcinogenicity:

NTP: No

IARC: No

OSHA: No

EPA: No

C. EMERGENCY AND FIRST AID PROCEDURES

Ingestion:

No data available but one should obtain medical attention

Skin Contact:

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

Eye Contact:

Immediately flush eyes, including under eyelids, with large amounts of water for at least 15 minutes. Call a physician.

Inhalation:

No Specific information available, one should obtain medical attention.

SECTION 6 - REACTIVITY

Incompatibility:

Fluorine, bromine trifluoride, chlorine, strong alkali, hydrogen, hydrogen fluoride, lead chromate, strong oxidizers.

Hazardous Decomposition Products: None known.

Stability: Stable

Hazardous Polymerization: None known.

Other:

Powder may ignite spontaneously in air when finely divided. Powder reacts violently with fluorine and bromine trifluoride. Reactions of powder with oxidizers may cause fires and explosions.

SECTION 7 - ENVIRONMENTAL INFORMATION

RCRA Code: D001

TSCA Registered: Yes

Spill and Leak Procedures: Wearing full protective equipment, cover spill with dry sand or vermiculite, Mix well and carefully transfer to a container.

Waste Disposal: Recyclable resources. Consult state, local or federal EPA regulations for proper disposal.

SECTION 8 - PROTECTION INFORMATION

Ventilation Requirements: Glove bag or box with a dry inert atmosphere preferred.

Respiratory Protection: High efficiency particle respirator

Protective Gloves: Rubber

Eye/Face Protection: ANSI approved safety goggles

SECTION 9 - 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.

SECTION 10 - COMMENTS

Danger:

Combustible; dust cloud may explode when ignited; dust may irritate eyes and lungs.

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.