



Tantalum (Pellets, Evaporation Slugs and Sputter targets)

1. Product Identification

Trade Name: Tantalum (Pellets, Evaporation Slugs, Sputter Targets)
Chemical Formula: Ta
Recommended Use: Surface coating

2. Hazards Identification

Signal Word: None in Provided form
Hazard Statements: Not Classified
Precautionary Statements: P261 Avoid breathing dust/fume/vapor

HMIS Health Ratings (0-4):

Health: Not classified
Flammability: Not Classified
Physical: Not Classified

3. Composition

Chemical Family: Metal
Additional Names: N/A
Tantalum (Ta):
Percentage: 100 wt%
CAS #: 7440-25-7
EC #: NA

4. First Aid Procedures

General Treatment: Seek medical attention if symptoms persist.
Special Treatment: None
Important Symptoms: None
Inhalation: No specific recommendations. Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion: Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.
Skin: Wash affected area with mild soap and water. Remove any contaminated clothing.

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Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

5. Fire and Explosion Hazards Data

Flammability: The product is not flammable.

Autoignition Temperature: N/A

Extinguishing Media: Do not use water for metal fires – use sand, extinguishing powder, CO₂.

Spec. Fire Fighting Procedure: Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.

Environmental Precautions: Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions: Wash thoroughly after handling.
Mixing, blending, milling, or grinding of dry powder should be done only under argon or helium.

Storage Conditions: Store in a cool dry place in a tightly sealed container.

Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

Ventilation: Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits: N/A

Threshold Limit Value: N/A

Special Equipment: None

Respiratory Protection: Dust Respirator, NIOSH approved

Protective Gloves: Rubber gloves

Eye Protection: Safety glasses or goggles

Body Protection: Protective work clothing. Wear close-toed shoes and long sleeves/pants.

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9. Physical and Chemical Characteristics

Color	Metallic to blue grey
Form:	Pellets, Evaporation Slugs, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	3017 °C
Density:	16.69 g/cc
Molecular weight:	180.95 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents, Air, Halogens, Halocarbons, Mineral acids
Incompatible Conditions:	There are no known conditions that are likely to result in a hazardous situation.
Hazardous Decomposition Products:	No potentially hazardous reactions known.

11. Toxicological Information

Potential Health Effects:	
Eyes:	Based on available data the classification criteria are not met
Skin:	Based on available data the classification criteria are not met
Ingestion:	Based on available data the classification criteria are not met
Inhalation:	Based on available data the classification criteria are not met
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	N/A
Carcinogen:	N/A

12. Ecological Information

Ecological data is not available.

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).
Hazard Class:	Not classified. No transport warning sign required.
Packing Group:	Not applicable
UN Number:	Not applicable
Proper Shipping Name:	Not applicable

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15. Regulatory Information

Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Emission Reporting	None of the ingredients are listed or exempt

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. **No warranty, guarantee or representation is made to its accuracy, reliability or completeness.** These materials should only be handled by, or under the direct supervision of a “technically qualified individual”, as defined in TSCA regulations 40 CFR 710.3(ee). The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products

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