



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name: Tantalum Products

Use of the Substance/Preparation: Various, Industrial Products

Supplier:

A&R Merchants Inc.

2101 NW 93rd Avenue, Doral, Florida 33172, United States Of America

Tel: +1.800.805.9150 • Email: info@armerchants.com

Emergency Email: ronald.gilerman@armerchants.com

Emergency Email: nina.svakhina@armerchants.com

Website: www.armerchants.com

2. HAZARDS IDENTIFICATION

HAZARD OVERVIEW:

We do not consider this product in the form it is sold to constitute a physical hazard or a health hazard. Subsequent operations such as abrading, melting, welding, cutting or processing in any other fashion may produce potentially hazardous dust or fumes which can be inhaled, swallowed, or come in contact with the skin or eyes.

PRIMARY ROUTES OF ENTRY: Inhalation, Skin contact.

TARGET ORGANS: Lungs; Skin

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:

Listed below are certain potential health hazards, which apply to the hazardous ingredients, found in the subject material

TANTALUM Inhalation May be moderately toxic by inhalation

Skin Some industrial skin irritation from tantalum has been reported.

Chronic Evidence suggests tantalum metal has a low toxicity potential due to poor absorption. Tantalum dust has caused transient inflammatory lesions in the lungs of animals. Systemic industrial poisoning is apparently unknown.



MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Individuals who may have had allergic reactions to metals or sensitivity, may encounter skin rash or dermatitis, if skin contact with this product occurs. Persons with impaired pulmonary functions, may incur further impairment if dust or fumes are inhaled

CARCINOGENIC REFERENCES:

Not recognized by OSHA as a carcinogen
Not listed in the National Toxicology Program

3. COMPOSITION/INFORMATION ON INGREDIENTS

| MATERIAL | CAS No. | % at. |
|----------|-----------|-------|
| Tantalum | 7440-25-7 | 100 |

4. FIRST AID MEASURES

Skin Contact: Wash thoroughly with soap and water. Seek medical attention if redness, swelling, itching, or burning occurs.

Eye Contact: Flush eyes immediately with large amounts of water for 15 minutes. Seek medical attention if redness, swelling, itching, burning or visual disturbances occur.

Inhalation: If cough, shortness of breath or other breathing problems occur, move to fresh air. Seek medical attention if symptoms persist. If necessary, restore normal breathing through standard first aid measures.

Ingestion: Do not induce vomiting. If conscious, give several glasses of water. Never give anything by mouth to an unconscious person.

Notes to Physician: Treat symptomatically.



5. FIRE-FIGHTING MEASURES

Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special Protective Equipment for Firefighters:

Wear suitable protective equipment. In the event of fire, wear self-contained breathing apparatus.

Specific Hazards: Dust/air mixture may ignite or explode. May ignite if exposed to shock, friction or heating. Avoid friction and static electricity.

Hazardous Decomposition and/or Combustion Products:

Miscellaneous thermal decomposition products.

Risk of Dust Explosion: Dust/air mixtures may ignite or explode.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: In solid form this material poses no special clean-up problems. Use normal clean up procedures; wet sweeping or HEPA vacuum, for cleanup of dust or powder. Do not use compressed air for cleaning.

7. HANDLING AND STORAGE

In solid form this material poses no special problems. Store metal in a dry area.

Do not store adjacent to acids.



8. HANDLING AND STORAGE

EXPOSURE LIMIT VALUES: Not established for product as whole. Tantalum: TLV, ACGIH: 5 mg/m³ PEL, OSHA: 5 mg/m³

PERSONAL PROTECTIVE EQUIPMENT:

Eye protection requirements: Safety glasses are recommended.

Skin protection requirements: Protective gloves are recommended, to prevent mechanical irritation.

Respiratory protection: Not normally required, use an appropriate NIOSH approved respirator if airborne dust concentration exceed the OSHA, PEL or ACGIH, TLV

Other protective equipment: Eye wash fountain should be readily available in areas of use or handling.

VENTILATION REQUIREMENTS:

Local Exhaust: Recommended, when cutting, grinding or melting or any other operation where dust or fumes are created

General Exhaust: Recommended.

ENVIRONMENTAL SURVEILLANCE:

If the operation generates dust or fumes, exposure to airborne materials should be determined by having air samples taken in the employees breathing zone and work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|-----------------------------|------------------|--|
| PHYSICAL FORM: | Solid metal | COLOR: Silver/Grey |
| ODOR: | None | MELT POINT: 2996 °C |
| SOLUBILITY IN WATER: | Insoluble | SPECIFIC GRAVITY: N/A |
| VOLATILE BY WEIGHT: | Essentially zero | DENSITY: 16.6 g/cm ³ |

10. PHYSICAL AND CHEMICAL PROPERTIES

STABILITY: This is a stable material.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITIES: Oxidizing agents Halogens, Bases, Hydrogen fluoride (HF)

DECOMPOSITION PRODUCTS: None under proper usage conditions.

CONDITIONS TO AVOID: Conditions which create dust or fumes. Exposure to high heat or flame.



11. TOXICOLOGICAL INFORMATION

Under normal use of the solid form of this material there are few health hazards. Welding, cutting grinding or any process creating dust, fume or oxide may cause hazardous levels of certain elements, as addressed in Section 3.

12. ECOLOGICAL INFORMATION

In solid form this material poses no special environmental problems. Metal powder or dust may have significant impact on air and water quality. Emissions, Spills and releases to the environment should be controlled immediately.

13. DISPOSAL CONSIDERATIONS

Product, as supplied, should be disposed of in accordance with the regulations issued by the appropriate federal, state and local authorities. Same consideration should be given to containers and packaging.

14. TRANSPORT INFORMATION

GROUND TRANSPORTATION:

D.O.T. SHIPPING NAME: Not regulated

TECHNICAL SHIPPING NAME: Metal Alloy

D.O.T. HAZARD CLASS: None

UN/NA NUMBER: None

PRODUCT RQ: None

AIR TRANSPORT:

ICAO-TI and IATA-DGR: Not Regulated in Solid Form

15. REGULATORY INFORMATION

OSHA STATUS:

No specific regulations. The Hazard Communication Standard of the Occupational Safety and Health Administration, 29 CFR 1910.1200 considers components of this product a Hazardous Substance.

TSCA STATUS:

All components of this product are listed in the US Environmental Protection Agency on the TSCA Chemical Substance Inventory

RCRA STATUS: NOT REGULATED IN SOLID FORM.



SARA TITLE III:

The constituents of this alloy contain hazardous substances, above one (1) percent, and are subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know act of 1986 and 40CFR372.

| SUBSTANCE CAS No. | PERCENT MAXIMUM |
|-------------------|-----------------|
|-------------------|-----------------|

| | |
|------|--|
| NONE | |
|------|--|

| | |
|---------------|--|
| INTERNATIONAL | |
|---------------|--|

Product Name: Tantalum Metal Products **Chemical Name**

Tantalum -- (Tested and Found to be Not Toxic): Listed

16. OTHER INFORMATION

Prepared by: AR Merchants Inc – Ronald Gilerman