Creation Date: 9/8/2009 Revision Date: 3/17/2017

### MATERIAL SAFETY DATA SHEET

## **SECTION 1 – IDENTIFICATION**

**Product Name:** Tantalum (V) oxide

**CAS#**: 1314-61-0 **EC Number**: 215-238-2

**Synonyms:** Ta<sub>2</sub>O<sub>5</sub>, Tantalum Pentoxide

Recommended Use: Laboratory chemicals.

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):

The substance is not classified as hazardous according to 29 CFR 1910 (OSHA GHS).

**Label Elements:** Not applicable.

**Precautionary Statements:** 

May form combustible dust concentrations in air. Dust may irritates eyes and respiratory system.

# **SECTION 3 – Composition / information on ingredients**

Chemical: Tantalum (V) oxide

CAS#: 1314-61-0 EC Number: 215-238-2 Weight %: >95%

## **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. Wash mouth out with 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.

Creation Date: 9/8/2009 Revision Date: 3/17/2017

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:

The product is not flammable. Use normal firefighting procedures which suit the surrounding fire.

Unsuitable extinguishing media: No information available.

### 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:

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.

### 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):** Long-term value – 5 mg/m³ dusts as Ta. **REL(USA):** Short-term value – 10 mg/m³ dusts.

Long-term value – 5 mg/m<sup>3</sup> dusts.

TLV(USA): Withdrawn

Appropriate engineering controls: None under normal use conditions

#### 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.

Creation Date: 9/8/2009 Revision Date: 3/17/2017 **Respiratory protection:** No protective equipment needed under normal use conditions.

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

### **SECTION 9 – Physical and chemical properties**

Physical Form:Powder solidColor:Off whiteOdor:Odorless

Oder threshold: No information available.

**Ph value:** Not applicable. **Melting point:** 1870°C / 3400°F

**Boiling point:**No information available. **Flash point:**No information available

**Evaporation rate:** Not applicable.

Flammability: No information available.
Flammability or explosive limits: No information available.
Vapor pressure: No information available.

Vapor density: Not applicable.

Relative density: No information available.

Solubility(ies): Insoluble in water.

Partition coefficient n-octane/water:
Auto-ignition temperature:
No information available.
No information available.
No information available.

Viscosity: Not applicable.

Molecular Weight: 441.89

## **SECTION 10 – Stability and reactivity**

Reactivity: Not known.

Chemical Stability: Stabile under recommended conditions.

Possibility of hazardous reactions: Reacts with strong oxidizing agents.

**Conditions to avoid:** No information available.

Incompatible materials: Oxidizing agents

**Hazardous decomposition products:** None under normal use conditions.

# **SECTION 11 – Toxicological information**

**Acute Toxicity:** 

LD50 Oral: 8000mg/kg (rat).
LD50 Dermal: Not listed.
LC50 Inhalation: Not listed.

Route of exposure: No information available. Symptoms: No information available.

**Exposure:** May cause irritation of skin and eye.

SECTION 12 – Ecological information

**Ecotoxicity:** Do not empty into drains.

Persistence and degradability: Insoluble in water.

**Bioaccumulative potential:** No information available.

**Mobility in the soil:** Low mobility due to its low water solubility.

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:
UN proper shipping name:
Not regulated.
Transport Hazard Class(es):
Not regulated.
Packaging group:
Not regulated.
Environmental hazards:
Not regulated.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):

Not regulated.

Special Precautions: Not regulated.

# **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.