Stanford Advanced Materials Safety Data Sheet Tantalum Tungsten Alloy

1. Product and Company Identification

Trade Name: Tantalum tungsten alloy

Chemical Formula: Ta/W

Recommended Use: Scientific research and development

Manufacturer/Supplier: Stanford Advanced Materials

Street: 23661 Birtcher Dr. City: Lake Forest

City: Lake Fo
State: CA
Zip Code: 92630
Country: USA

Tel #: (949) 407 8904

24-Hour Emergency Contact: 800-424-9300 (US & Canada)

+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger





Hazard Statements: H228: Flammable solid

H315: Causes skin irritation

H319: Causes serious eye irritation H335: May cause respiratory irritation

Precautionary Statements: P210: Keep away from heat/sparks/open flames/hot surfaces – No

smoking

P261 Avoid breathing dust/fume/vapor

P280: Wear protective gloves/protective clothing/eye protection/face

protection

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest

in a position comfortable for breathing

P305+P351+P338: IF IN EYES: Rinse cautiously with water for

several minutes. Remove contact lenses if present and easy to do $-\,$

continue rinsing

P370+P378; In case of fire: Use CO₂ or powder for extinction

P405: Store locked up

P501: Dispose of contents/container in accordance with

local/regional/national/international regulations

HMIS Health Ratings (0-4): Powder Bulk

Health: 1 1 1 Flammability: 3 0 Physical: 1 0

| Composition % | · · · · · · · · · · · · · · · · · · · | | | · · · · · · · · · · · · · · · · · · · | |
|--|---|--|---|--|--|
| | ' | . * * | | 1. | |
| | | | | | |
| / | : ' ' | ' | : | :" | |
| 5 | . : | : | | . : | : |
| 7 7 9 | | | | | |
| Aid Procedures | · · · | | . ' | | , ' ' |
| Ald Flocedules | | | | | |
| lical attention if sy | ymptoms pe | ersist. | :" | :" | |
| lical attention | | | | | : ' |
| ated clothing. s with water, blin | nking often f | for severa | l minutes. l | | |
| ghting Measures | : ' ' | | ; | | |
| mable, except as | powder | | | | |
| face, self-containe | ed breathing | apparatu | s with full 1 | protective | : ' |
| sition products. | '', | | . ' | 1. | . ' ' |
| al Release Measur | res | | | | |
| rotection informat | tion. Isolate | spill area | and provid | le | |
| not to raise dust. | • | ' | ' ' | or disposal. | : |
| | ' | - Pondero | | | |
| ling and Storage | | | | | |
| cool dry place in and conditions lis | a tightly se sted in secti | on 10. | ; | | |
| d smoking. Do no ed air. | ot blow dust | off cloth | ing or skin | with | : ' |
| 79 A lii viii e a ser — g — nr see a con lii — r see d e u | Aid Procedures ical attention if s ictim to fresh air ical attention cted area with m ited clothing. Is with water, blir inses if present ar whiting Measures mable, except as the water for metal ace, self-contained to prevent contact ition products. I Release Measure ropriate respirate to tection informat in. Vacuum up sp HEPA) air filter not to raise dust inoff to prevent en ing and Storage roughly after han cool dry place in and conditions li te tobacco or food smoking. Do no ed air. | Aid Procedures ical attention if symptoms per ical attention if symptoms per ical attention icted area with mild soap and attention it icted area with mild soap and attention icted area with mild soap and attention icted area with mild soap and attention in it icted in it icted area with mild soap and attention in it icted area with mild soap and attention in it icted area with it icted at icted attention in it icted attention in icted in | Aid Procedures ical attention if symptoms persist. ictim to fresh air. Supply oxygen if brical attention cted area with mild soap and water. Rated clothing. Is with water, blinking often for several asses if present and easy to do. Continuent thing Measures mable, except as powder e water for metal fires — use CO2 or exace, self-contained breathing apparatuse of prevent contact with skin and eyes. It in products. I Release Measures ropriate respiratory and protective equipotection information. Isolate spill area and. Vacuum up spill using a high efficient HEPA) air filter and place in a closed not to raise dust. In off to prevent environmental pollution in and storage roughly after handling. cool dry place in a tightly sealed contained conditions listed in section 10. The tobacco or food in work area. Wash is smoking. Do not blow dust off clothed air. Infficient ventilation to maintain conce | Aid Procedures ical attention if symptoms persist. ictim to fresh air. Supply oxygen if breathing is of ical attention cted area with mild soap and water. Remove any sted clothing. Is with water, blinking often for several minutes. It is is if present and easy to do. Continue rinsing setting Measures mable, except as powder water for metal fires – use CO ₂ or extinguishing ace, self-contained breathing apparatus with full proportion products. I Release Measures Topriate respiratory and protective equipment specification information. Isolate spill area and provide. Vacuum up spill using a high efficiency particus HEPA) air filter and place in a closed container for not to raise dust. Toff to prevent environmental pollution. ing and Storage Toughly after handling. cool dry place in a tightly sealed container. Store and conditions listed in section 10. To the tobacco or food in work area. Wash thoroughly smoking. Do not blow dust off clothing or skin of the container concentration at conficient ventilation to maintain concentration at concentration at conficient ventilation to maintain concentration at concentration | Aid Procedures ical attention if symptoms persist. ictim to fresh air. Supply oxygen if breathing is difficult. ical attention cted area with mild soap and water. Remove any ited clothing. Is with water, blinking often for several minutes. Remove asses if present and easy to do. Continue rinsing thing Measures mable, except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. It was except as powder water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – use CO2 or extinguishing powder. water for metal fires – u |

8. Exposure Controls and Personal Protection

Permissible Exposure Limits: 5 mg/m³ as Ta metal, long-term value

Threshold Limit Value: 5 mg/m³ as W, long-term value

10 mg/m³ as W, short-term value

Special Equipment: None

Respiratory Protection: Use a respirator with type P100 (USA) or P3 (EN143) cartridges as a

backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government

standards.

Protective Gloves: Rubber gloves

Eye Protection: Safety glasses or goggles

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

sleeves/pants.

9. Physical and Chemical Characteristics

Color Mettalic

Form: Powder, Granules, Pellets, Sputtering target, Custom parts

Odor: Odorless
Water Solubility: Insoluble
Boiling Point: N/A

Melting Point: 3020-3422 °C

Flash Point: N/A
Autoignition Temperature: N/A
Density: N/A
Molecular weight: N/A

10. Reactivity

Stability: Stable under recommended storage conditions

Reacts With: Acids, Oxidizing agents

Incompatible Conditions: None

Hazardous Decomposition Products: Tantalum oxide, Metal oxide fume

11. Toxicological Information

Potential Health Effects:

Eyes: Causes serious eye damage

Skin:Causes irritationIngestion:May cause irritationInhalation:May cause irritation

Chronic: N/A

Signs & Symptoms: N/A
Aggravated Medical Conditions: N/A

Median Lethal Dose: N/A

Carcinogen: N/A

12. Ecological Information

Aquatic Toxicity: Low

Persistent Bioaccumulation Toxicity: No Very Persistent, Very Bioaccumulative: No Notes: N/A

13. Disposal Considerations

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

14. Transportation Data

Hazardous: Hazardous as powder only.



Hazard Class: 4.1 Flammable solid, self-reactive substances and solid desensitized

explosives

Packing Group:

UN Number: UN3089

Proper Shipping Name: Métal powders, flammable, n.o.s. (Tantalum tungsten alloy)

15. Regulatory Information

Sec 302 Extremely Hazardous:

No
Sec 304 Reportable Quantities:

N/A
Sec 313 Toxic Chemicals:

No

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. 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.

Document Last Revised: 07/02/2015