

SAFETY DATA SHEET

Revision date 16-July-2020

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

CAS No. Product Name Molecular Formula

7440-25-7 Tantalum powder

Relevant identified uses of the substance or mixture and uses advised against

Recommended use

Scientific Research

Details of the supplier

Company name Address

Website Telephone Fax

Hunan Huawei Jingcheng Material Technology Co., Ltd. Room 516, Hunan International Business Center, Jintai Plaza, East Second Ring, Furong District, Changsha City, Hunan Province, China.

www.hnjc-metal.com 0086-731-85124338

Emergency telephone number

0086-731-85124338

Section 2: HAZARDS IDENTIFICATION

GHS Classification (29 CFR 1910.1200): Flammable solid, category 1

GHS label elements not applicable

Hazard pictograms not applicable

Signal word danger

Hazard statements H228 Flammable solid

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces - No smoking, P370+P378 In case of fire: Use Class D dry chemical extinguishing agent for extinction.

Hazards not otherwise classified (HNOC) or not covered by GHS

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Substances

CAS No.: 7440-25-7

Description: Tantalum powder

Section 4: FIRST AID MEASURES

Description of first aid measures

If inhaled

Remove to fresh air, keep warm and quiet, give oxygen if breathing is difficult. Seek medical attention if irritation develops or persists. In case of skin contact

Remove contaminated clothing, brush material off skin, wash affected area with soap and water. Seek medical attention if irritation develops or persists.

In case of eye contact

Flush eyes with lukewarm water, including under upper and lower eyelids, for at least 15 minutes. Seek medical attention if irritation Hunan Huawei Jingcheng Material Technology Co., Ltd.www.hnjc-metal.com

develops or persists.

If swallowed

Rinse mouth with water. Do not induce vomiting. Seek medical attention if irritation develops or persists. Never induce vomiting or give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Acute and Delayed: May cause irritation. See section 11 for more information. Indication of Immediate Medical Attention and Special Treatment: No other relevant information available.

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: FIRE FIGHTING MEASURES

Extinguishing media Suitable

Use Class D dry powder extinguishing agent.

Special hazards arising from the substance or mixture

Fine dust dispersed in air in sufficient concentrations, and exposed to a source of ignition, can burn in the open or be explosive in confined spaces. May release tantalum oxide fume if involved in a fire.

Advice for firefighters

Wear full face, self-contained breathing apparatus and full protective clothing

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear appropriate respiratory and protective equipment specified in section 8. Eliminate all sources of ignition. Isolate spill area and provide ventilation.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up

Avoid dusting of powder to the greatest extent possible. Use only non-sparking tools and natural bristle brushes. Vacuum up spill using a vacuum rated for combustible metal dusts equipped with a HEPA filter. Place in properly labeled closed containers.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Handle under dry protective gas such as argon if possible. Protect from sources of ignition. Avoid contact with skin and eyes. Do not breathe dust or fumes. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Do not create a dust cloud by using a brush or compressed air. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. See section 8 for information on personal protection equipment.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry area. Store material tightly sealed in properly labeled containers, preferably under argon. Store away from heat and ignition sources. Store away from oxidizers. See section 10 for more information on incompatible materials.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Appropriate engineering controls

When working with finely divided powders, handle under argon in a controlled, enclosed environment. Ensure adequate ventilation to maintain exposures below occupational limits. Whenever possible the use of local exhaust ventilation or other engineering controls is the preferred method of controlling exposure to airborne dust and fume to meet established occupational exposure limits. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Personal protective equipment

Eye/face protection

Safety glasses

Skin protection

Impermeable gloves, protective work clothing as necessary.

Respiratory protection

Use suitable respirator when high concentrations are present.

Control of environmental exposure

Do not let product enter drains.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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- a) Appearance: powderb) Odor: Odorless
- c) Odor Threshold: no data available
- d) pH:N/A
- e) Melting point/freezing point: 2996 ℃
- f) Initial boiling point and boiling range: 5425±100°C
- g) Flash point: no data available
- h) Evaporation rate: no data available
- i) Flammability (solid, gas): flammable solid
- j) Upper/lower flammability or explosive limits: no data available
- k) Vapor pressure: no data available I) Vapor density: no data available m) Relative density: 16.6 g/cc at 20°C
- n) Water solubility: insoluble
- o) Partition coefficient noctanol/water: no data available
- p) Auto-ignition temperature: no data available
- q) Decomposition temperature: no data available
- r) Viscosity: no data available
- s) Explosive properties: no data available t) Oxidizing properties: no data available

Other safety information

No data available

Section 10: STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability Stable under recommended storage conditions

Possibility of hazardous reactions Flammable in the form of dust when exposed to sparks or flame. May react violently

with strong oxidizers.

Conditions to avoid Heat, sparks, flame. Dusting conditions.

Incompatible Conditions Acids, oxidizing agents, halogens, bromine trifluoride, fluorine, lead chromate,

sulfur=trioxide.

Hazardous Decomposition Products Tantalum oxide fume

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity: no data available

Inhalation: no data available Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available Respiratory or skin sensitization: no data available

Germ cell mutagen city: no data available

Carcinogenicity

IARC: Not identified as carcinogenic

NTP: Not identified as carcinogenic

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity No further relevant information available.

Persistence and degradability
Bioaccumulation
Mobility
No information available.

Other adverse effects Do not allow material to be released to the environment. No further relevant information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Reuse or recycle material whenever possible. Dispose of in accordance with Federal, State and Local regulations.

Contaminated packaging

Dispose of in accordance with Federal, State and Local regulations.

Section 14: TRANSPORT INFORMATION DOT (US)

UN Number: 4.1

UN Proper Shipping Name: Metal powder, flammable, n.o.s., (Tantalum)

Section 15: REGULATORY INFORMATION

TSCA Listed: All components are listed.

Regulation (EC) No 1272/2008 (CLP): Flammable solid, category 1.

Canada WHMIS Classification (CPR, SOR/88-66): Class B, Division 4 - Flammable material.

HMIS Ratings: Health: 1 Flammability: 2 Physical: 0 NFPA Ratings: Health: 1 Flammability: 2 Reactivity: 0

Chemical Safety Assessment: A chemical safety assessment has not been carried out.

Section 16: OTHER INFORMATION

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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