

## SAFETY DATA SHEET

Preparation Date: 10/23/2017

Revision Date: 10/23/2017

Revision Number: G1

### 1. IDENTIFICATION

#### Product identifier

**Product code:** T1140  
**Product Name:** TUNGSTEN METAL, 100 MESH, POWDER

#### Other means of identification

**Synonyms:** No information available  
**CAS #:** 7440-33-7  
**RTECS #** YO7175000  
**CI#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** No information available.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>  
**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Flammable solids	Category 2

#### Label elements

##### **Warning**

**Hazard statements**  
 Causes skin irritation  
 Causes eye irritation  
 Flammable solids



#### **Hazards not otherwise classified (HNOC)**

Not Applicable

#### **Other hazards**

May be harmful if inhaled

#### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/.../equipment  
Wear eye/face protection  
Wear protective gloves

#### **Precautionary Statements - Response**

In case of fire: Use dry powder extinguisher for Class D or combustible metal fires to extinguish.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse

#### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up  
Store contents under .?  
Store in a dry place

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Components</b>	<b>CAS-No.</b>	<b>Weight %</b>
Tungsten Metal, powder	7440-33-7	100

### **4. FIRST AID MEASURES**

#### **First aid measures**

##### **General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

##### **Skin Contact:**

Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

##### **Eye Contact:**

Flush eyes with water for 15 minutes. Get medical attention.

##### **Inhalation:**

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

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**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Causes eye irritation  
Causes skin irritation

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media:** Dry powder. Class D fire extinguisher.

**Unsuitable Extinguishing Media:** Water. Dousing metallic fires with water may generate hydrogen gas, an extremely dangerous explosion hazard.

**Specific hazards arising from the chemical**

**Hazardous Combustion Products:** Tungsten oxide.

**Specific hazards:** Flammable solid.

**Special Protective Actions for Firefighters**

**Specific Methods:** No information available.

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions:** Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition. Do not expose spill to water.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up**

**Methods for containment** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials. Keep away from open flames, hot surfaces and sources of ignition. All equipment used when handling the product must be grounded.

#### **Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice. Never add water to this product.

### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

#### **Incompatible Materials:**

Oxidizing agents  
Strong acids

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **National occupational exposure limits**

##### **United States**

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Tungsten Metal, powder	7440-33-7	None	= 5 mg/m <sup>3</sup> TWA	= 10 mg/m <sup>3</sup> STEL	None

##### **Canada**

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Tungsten Metal, powder	7440-33-7	= 5 mg/m <sup>3</sup> TWA	= 5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA	None

##### **Australia and Mexico**

Components	CAS-No.	Australia	Mexico
Tungsten Metal, powder	7440-33-7	None	None

### Appropriate engineering controls

#### **Engineering measures to reduce exposure:**

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Individual protection measures, such as personal protective equipment

#### **Personal Protective Equipment**

<b>Eye protection:</b>	Safety glasses with side-shields or Goggles
<b>Skin and body protection:</b>	Chemical resistant apron Gloves Long sleeved clothing
<b>Respiratory protection:</b>	Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
<b>Hygiene measures:</b>	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Solid	<b>Appearance:</b> Metal. Powder.	<b>Color:</b> Gray.
<b>Odor:</b> Odorless.	<b>Taste</b> No information available.	<b>Formula:</b> W
<b>Molecular/Formula weight:</b> 183.85	<b>Flammability:</b> No information available	<b>Flashpoint (°C/°F):</b> No information available.
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 3410°C/6170°F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> 5900°C/10652°F	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> 18.7-19.3	<b>pH:</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> No information available	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Insoluble in water Soluble in a mixture of nitric acid and hydrofluoric acid	

## 10. STABILITY AND REACTIVITY

### Reactivity

Incompatible with Bromine, Bromine Trifluoride, Bromine Pentafluoride, Chlorine Trifluoride, Fluorine, Iodine Pentafluoride, Potassium Perchlorate, Potassium Dichromate, Nitryl Fluoride, Oxygen Difluoride, HydrogenSulfide, Sodium Peroxide, Lead (IV) Oxide. Reaction with Fluorine, Chlorine trifluoride may be incandescent.

### Chemical stability

**Product code:** T1140

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100 MESH, POWDER

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**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Incompatible materials.

**Incompatible Materials:** Oxidizing agents  
Strong acids

**Hazardous decomposition products:** Tungsten oxide.

**Other Information**

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**

Ingestion. Inhalation.

### Acute Toxicity

### Component Information

Tungsten Metal, powder	
CAS-No.	7440-33-7

**LD50/oral/rat** = No information available  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rabbit** = No information available  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50 information** = No information available

### Product Information

**LD50/oral/rat** =  
**VALUE- Acute Tox Oral** = No information available

**LD50/oral/mouse** =  
**Value - Acute Tox Oral** = No information available

**LD50/dermal/rabbit**  
**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**  
**VALUE -Acute Tox Dermal** = No information available

**LC50/inhalation/rat**  
**VALUE-Vapor** = No information available  
**VALUE-Gas** = No information available  
**VALUE-Dust/Mist** = No information available

**Product code:** T1140

**Product name:** TUNGSTEN METAL,  
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**LC50/Inhalation/mouse**

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

**Symptoms****Skin Contact:** Causes skin irritation. May cause skin irritation by mechanical action.**Eye Contact:** Causes eye irritation. Mild eye irritation. Dust can cause eye irritation by mechanical action.**Inhalation** May cause irritation of respiratory tract.**Ingestion** Ingestion may cause nausea, vomiting. May cause anorexia.**Aspiration hazard** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Chronic Toxicity** Repeated (chronic) exposure by inhalation may affect the lungs.**Sensitization:** No information available.**Mutagenic Effects:** No information available**Carcinogenic effects:** Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Tungsten Metal, powder	7440-33-7	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)**IARC (International Agency for Research on Cancer)**NTP (National Toxicology Program)**OSHA (Occupational Safety and Health Administration of the US Department of Labor)***Reproductive toxicity** No data is available**Reproductive Effects:** No information available**Developmental Effects:** No information available**Teratogenic Effects:** No information available**Specific Target Organ Toxicity****STOT - single exposure** No information available.**STOT - repeated exposure** No information available.**Target Organs:** No information available.**12. ECOLOGICAL INFORMATION****Ecotoxicity****Ecotoxicity effects:** No data available.**Product code:** T1140**Product name:** TUNGSTEN METAL,  
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**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

### 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

**Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Tungsten Metal, powder	7440-33-7	None	None	None	None

### 14. TRANSPORT INFORMATION

#### DOT

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powders, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Class** No information available  
**Packing group:** III  
**Emergency Response Guide Number** 170  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** IB8, IP2, IP4, T1, TP33, W100  
**Symbol(s):** No information available  
**Description:** UN3089, Metal powders, flammable, n.o.s., 4.1, III

#### TDG (Canada)

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant** No Information available  
**Description:** UN3089, Metal powder, flammable, n.o.s., 4.1, III

#### ADR

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Packing Group:** III  
**Subsidiary Risk:** No information available  
**Special Provisions** 552  
**Description:** UN3089, Metal powder, flammable, n.o.s., 4.1, III

#### IMO / IMDG

**Product code:** T1140

**Product name:** TUNGSTEN METAL,  
100 MESH, POWDER



**UN-No:** UN3089  
**Proper Shipping Name:** Metal powders, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant:** No information available  
**EMS:** F-G  
**Special Provisions:** 223  
**Description:** UN3089, Metal powder, flammable, n.o.s., 4.1, III

**RID**

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Special Provisions:** 552  
**Description:** UN3089, Metal powder, flammable, n.o.s., 4.1, III

**ICAO**

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Description:** UN3089, Metal powder, flammable, n.o.s., 4.1, III  
**Special Provisions:** A3

**IATA**

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**ERG Code:** 3L  
**Special Provisions:** No information available  
**Description:** UN3089, Metal powder, flammable, n.o.s., 4.1, III

**15. REGULATORY INFORMATION**

**International Inventories**

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Tungsten Metal, powder</i>	7440-33-7	Present	Present KE-35000	Present	Not present	Present	Present	Present 231-143-9

**U.S. Regulations**

*Tungsten Metal, powder*

- Massachusetts RTK:** Present
- New Jersey RTK Hazardous Substance List:** 1959
- Pennsylvania RTK:** Present
- Minnesota - Hazardous Substance List:** Present
- California Directors List of Hazardous Substances:** Present

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

Chemicals Known to the State of California to Cause Cancer:

**Product code:** T1140

**Product name:** TUNGSTEN METAL,  
100 MESH, POWDER

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Tungsten Metal, powder	7440-33-7	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Tungsten Metal, powder	7440-33-7	None	None	None	None	None

**U.S. TSCA**

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Tungsten Metal, powder	7440-33-7	Not Applicable	Not Applicable

**Canada**

**WHMIS 2015 - GHS Classifications**

WHMIS 2015 Hazard Classification Information: Not a dangerous product according to HPR classification criteria.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

**WHMIS 1988 Hazard Class**

- B4 Flammable solid
- B6 Reactive flammable material

**Components**

Tungsten Metal, powder

WHMIS 1988

Uncontrolled product according to WHMIS classification criteria

**Canada Controlled Products Regulation:**

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Tungsten Metal, powder	1 %

**Inventory**

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Tungsten Metal, powder	7440-33-7	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Tungsten Metal, powder	7440-33-7	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Tungsten Metal, powder	7440-33-7	Not listed

**EU Classification**

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Tungsten Metal, powder	7440-33-7	No information

EU - CLP (1272/2008)

**R-phrase(s)**

Not determined

**S -phrase(s)**

none

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Tungsten Metal, powder	7440-33-7		No information	

**The product is classified in accordance with Annex VI to Directive 67/548/EEC****Indication of danger:**

not determined

**16. OTHER INFORMATION**

**Preparation Date:** 10/23/2017  
**Revision Date:** 10/23/2017  
**Prepared by:** Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**