



Material Safety Data Sheet
Revised 10/28/11

Tungsten Products
MSDS – 0828

1. Identification of the Substance and of the Company	1.1 Product Identified: Tungsten Products. 1.2 Uses: Lighting, furnace, electronics, medical applications. 1.3 Supplier : Elmet Technologies, Inc., 1560 Lisbon Street, Lewiston Maine 04240 1.4 Emergency Phone Number: 1-800-333-6100
2. Hazards Identification	2.1 Classification: Not a hazardous material per Regulation (EC) NO. 1272/2008 EC or EC Directive 67/548/EEC. 2.2 Label elements: Compact metal/alloy with no risk to human health or the environment. 2.3 Other hazards: Dusts from powder may present a fire hazard.
3. Composition/Information on Ingredients	3.1 Substances: Tungsten (CAS# 7440-33-7), additions of Lanthanum Oxide (CAS# 1312-81-8), Silicon (CAS# 7440-21-3), Potassium (CAS# 7440-09-7) at < 1% mass fraction. May be in powder, wire, filament of formed/machined metal parts. 3.2 Mixtures: None
4. First Aid Measures	4.1 First aid measures: Wash dust off thoroughly with soap and water. 4.2 Symptoms, effects: Inhalation, eyes – dust may cause irritation. 4.3 Medical, treatment: Consult physician after prolonged exposure to dust. There are no components listed as carcinogen or potential carcinogen per NTP, OSHA or IARC.
5. Firefighting Measures	5.1 Extinguishing media: Dry chemical extinguishing media recommended. 5.2 Special hazards: Powder is weak fire and explosion hazard. Fine dust is flammable when exposed to flame. 5.3 Firefighting advice: Breathing protection in presence of dust. Dry Chemical extinguishing media recommended.
6. Accidental Release Measures	6.1 Precautions, PPE, emergency procedures: Eliminate sources of ignition. Do not create dust cloud during clean up operations. 6.2 Environmental precautions: No environmental protection measures required. 6.3 Containment and clean up: Carefully scoop, shovel or vacuum up the spilled material and place in a suitable container. 6.4 Reference to other sections: None
7. Handling and Storage	7.1 Safe handling: Avoid dust formation. Use suction cleaning methods. Avoid sources of ignition including static sparks. 7.2 Safe storage, incompatibilities: No special measures required. Store in cool, dry, ventilated area. 7.3 Specific end uses: None – refer to section 1.2
8. Exposure Controls/ Personal Protection	8.1 Control parameters: OSHA PEL: 5 mg/m ³ ; ACGIH TLV: 5 mg/m ³ . 8.2 Exposure controls: Wear goggles and repertory protection when dealing with dust. Wear a NIOSH approved respirator if airborne concentrations exceed limits cited above.
9. Physical and Chemical Properties	9.1 Physical, chemical properties: Appearance: silver-grey to black. Boiling point: 7927 degrees C. Vapor pressure: 1 mmHg @ 20 degrees C. Specific gravity: 19.3 g/cm ³ @ 20 degrees C. 9.2 Other information: Not water soluble. Material has very high density. Powder/dust will settle quickly.

10. Stability and
Reactivity

- 10.1 Reactivity: Not reactive.
- 10.2 Chemical stability: Stable.
- 10.3 Possible hazardous reactions: No known hazardous reactions.
- 10.4 Conditions to avoid: Avoid high temperature in air.
- 10.5 Incompatible materials: Halogens, nitric and sulfuric acids, oxidants.
- 10.6 Hazardous decomposition products: Will form trioxide when heated in air and sublime at temperatures above 800 degrees C.

11. Toxicological Information

- 11.1 Toxicological effects: No known toxic effects.

12. Ecological Information

- 12.1 Toxicity: No known toxic effects.
- 12.2 Persistence, degradability: Stable.
- 12.3 Bioaccumulative potential: No evidence of bioaccumulative potential.
- 12.4 Soil mobility: Low due to low solubility.
- 12.5 Results of PBT, vPvB assessment: Does not meet criteria for these substances.
- 12.6 Other adverse effects: None

13. Disposal Considerations

- 13.1 Waste treatment: Dispose residues as metal waste. Consider reclamation or recycling. Follow federal, state, local, national and regional regulations.

14. Transport Information

- 14.1 UN number: Not dangerous to transport.
- 14.2 UN proper shipping name: Not dangerous to transport.
- 14.3 Transport hazard class: Not dangerous to transport.
- 14.4 Packing group: Not dangerous to transport.
- 14.5 Environmental hazards: Not dangerous to transport.
- 14.6 Special user precautions: Not dangerous to transport.
- 14.7 Transport per annex II of MARPOL73/78, IBC code: Not dangerous to transport.

15. Regulatory Information

- 15.1 Safety, health, environmental regulations/legislation: No labeling required. Obey pertinent regulations.
- 15.2 Chemical safety assessment: Not considered a hazardous substance.

16. Other Information

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