

Revision Date: 4/15/06

1. Chemical Product & Company InformationProduct: **TUNGSTEN POWDER****Buffalo Tungsten Inc****2 Main St****Depew, NY 14043****Tel: 716-683-9170****Fax: 716-683-0471****2. Composition Data**

<u>Component</u>	<u>CAS No</u>	<u>EINCES No</u>	<u>STEL (mg/m³)</u>	<u>TWA (mg/m³)</u>	<u>Typical Weight %</u>
Tungsten	7440-33-7	231-143-9	10	5	99.9

3. Hazard Identification**Emergency Overview**

No spill hazard, minimal health risk

POTENTIAL HEALTH EFFECTS

EYES: Irritation possible

SKIN: Irritation possible

INHALATION: None

INGESTION: Gastrointestinal irritation possible

MEDICAL CONDITIONS AGGRAVATED: Exposure to tungsten dust or fume may aggravate chronic respiratory disease

CHRONIC OVEREXPOSURE: Not known

ACUTE: OVEREXPOSURE: Not known

CARCINOGENICITY: None

4. First Aid Measures

EYES: Flush with large amounts of water for 15 minutes. If irritation occurs, seek medical attention.

SKIN: Wash with soap and water. If irritation occurs, seek medical attention.

INHALATION: Remove from exposure. If necessary aid breathing and seek medical attention.

INGESTION: If large amounts are ingested, consume large quantities of water and induce vomiting. Seek medical attention.

5. Fire Fighting Measures

FLAMMABLE PROPERTIES: Non-flammable

FLASH POINT: N/A

FLAMMABLE LIMITS (% Vol in Air):

Lower: none Upper: none

AUTO-IGNITION TEMPERATURE: N/A

HAZARDOUS COMBUSTION PRODUCTS: When tungsten burns in air it forms tungsten trioxide, which sublimates above 750°C (1382°F)

EXTINGUISHING MEDIA: Dry powder

FIREFIGHTING INSTRUCTIONS: Wear a self contained breathing apparatus. Under abnormal conditions, tungsten may present a fire hazard depending upon particle size, dispersion and exposure to an ignition source. This is not expected under normal conditions. Tungsten powder, particularly powder less than 1 micron (FSSS) can be ignited in air by friction during blending, milling or similar process. Ultra fine powders may ignite spontaneously in air.

6. Accidental Release Measures

SMALL/LARGE SPILL: Avoid dust generation. Provide adequate ventilation and use approved respirators. Vacuum or wet clean up methods are recommended to reduce dust generation. Use an approved filter when vacuuming.

7. Handling and Storage

HANDLING: Maintain good housekeeping practices to prevent dust accumulation.

STORAGE: Keep container closed.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: General and local ventilation is recommended

RESPIRATORY PROTECTION: A NOISH-approved respirator is required if TLV is exceeded

SKIN AND HAND PROTECTION: Protective gloves are recommended

EYE AND FACE PROTECTION: Safety glasses are recommended

OTHER PROTECTIVE EQUIPMENT: None under normal conditions

9. Physical and Chemical Properties

APPEARANCE: Gray to dark gray powder

BOILING POINT: 5900°C (10652°F)

MELTING POINT: 3410°C (6170°F)

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

SOLUBILITY IN WATER: Insoluble

DENSITY: 19.3 g/cc

PH: N/A

ODOR: none

PERCENT VOLATILES: <0.1%

EVAPORATION RATE: N/A

10. Stability and Reactivity

CHEMICAL STABILITY: Stable

INCOMPATIBILITY: Tungsten is slightly soluble in nitric acid, sulfuric acid and aqua regia. It is soluble in a mixture of HF acid and nitric acid. Vigorous reaction with bromine trifluoride.

Tungsten becomes incandescent in cold fluorine, lead oxide and iodine pentafluoride. Avoid oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: none

11. Toxicological Information

None

12. Ecological Information

None

13. Disposal Consideration

Dispose of the material in accordance with all government regulations. Material can be sold for reclaim.

14. Transportation Information

HAZARD CLASS: 4.1 Flammable Solid (For powders less than 0.7 microns)
IDENTIFICATION NO: UN3089
PACKING GROUP: III
SHIPPING NAME: Metal Powders, flammable, n.o.s., tungsten powder
ADR/RID ITEM: 13c
ADR/RID DANGER CODE: 40

15. Regulatory Information**US FEDERAL REGULATIONS**

TSCA STATUS: Listed on Toxic Substance Control Inventory
CERCLA REPORTABLE QUANTITY: none
SARA TITLE III: Section 311/312 Hazardous Categories- Acute, Chronic
RCRA STATUS: not regulated

INTERNATIONAL REGULATIONS

CANADIAN WHMIS: not regulated

RISK/SAFETY PHRASES

F Highly flammable
11 Highly flammable
22 Do not breathe dust
33 Take precautionary measures against static discharges

16. Other Information

HMIS HAZARD RATING: Health=1, Fire = 0, Reactivity = 0