

Revision Date: 4/15/06

**1. Chemical Product & Company Information**Product: **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/m<sup>3</sup>)</u>	<u>TWA (mg/m<sup>3</sup>)</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