



MATERIAL SAFETY DATA SHEET (MSDS)

MSDS for Blue Tungsten Oxide

1. IDENTIFICATION

Product Name: Blue Tungsten Oxide

CAS#: 1314-35-8

Chemical Formula: WO_{2.9}

Manufacturer: Chinatungsten Online (Xiamen) Manu. & Sales Corp.

2. HAZARDS DATA

Primary routes of entry: Inhalation, ingestion, skin or eye contact (for dusts, mists, powder and fume)

Health hazards: low toxicity. Irritate to eyes and skin. Tungsten smelting workers systemic weakness, fever, measles like rash, proteinuria, and inhaled the tungsten smelting.

Environmental hazards: harmful to the environment.

Explosion hazard: non combustible, no special burning characteristics.

3. FIRST AID MEASURES

Eye contact: If irritation occurs, flush with large amounts of water for at least 15 minutes. If irritation persists, seek medical attention.

Skin contact: Wash with soap and water. If irritation or rash occurs, isolate from exposure. If rash persists, seek medical attention.

Inhalation: If large amounts of dust are inhaled, move the exposed person to fresh air. If necessary, perform artificial respiration and seek medical attention.

Ingestion: If ingested, get medical attention. Give large quantities of water and induce vomiting. Seek medical attention.

4. FIRE FIGHTING MEASURES

Hazardous characteristics: a violent reaction with halogen compounds such as five bromine fluoride, three chlorine fluoride.

Fire extinguishing method: This product does not burn. According to the cause of the fire, select the appropriate fire extinguishing agent.

Fire precautions and measures: fire fighters have to wear full body fire protective clothing, in the upper hand to fire. When the fire as far as possible the containers from fire to open.

5. HANDLING AND STORAGE

Operating notes: airtight operation, partial discharge. Prevent dust from releasing into the air of the workshop. Operator must undergo special training, strictly comply with the operating procedures. Recommend the operator to wear self absorption filter dust masks, chemical safety glasses, rubber acid and alkali resistant clothing and rubber



gloves. Avoid producing dust. Avoid contact with five bromine fluoride, three chlorine fluoride. Emergency handling equipment equipped with leakage. Empty containers may contain harmful substances.

Storage note: store in a cool, ventilated warehouse. Away from the fire, heat source. Keep out of direct sunlight. Should be stored separately with the five bromine fluoride, three fluoride chlorine, avoid by all means. The storage area should be equipped with appropriate material containing leakage.

6. EXPOSURE CONTROLS, PERSONAL PROTECTION

Monitoring methods: potassium thiocyanate spectrophotometric method.

Engineering control: closed operation, local exhaust.

Respiratory protection: dust concentration in the air exceeds the standard, you must wear a filter type dust respirator. Emergency rescue or evacuation, should wear air breathing apparatus.

Eye protection: wear chemical safety goggles.

Body protection: wear rubber acid and alkali resistant clothing.

Hand protection: wear rubber gloves.

Other protection: No smoking, eating and drinking water. Wash their hands before meals. Work finished, shower and change. Maintain good hygiene practices.

7. PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance: blue crystalline powder.

pH (1% soln/water): Not available.

Boiling Point(°C): 1473.

Melting Point(°C): 1837.

Critical Temperature: Not available.

Specific Gravity: 7.16 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Solubility: insoluble in water, soluble in alkali, slightly soluble in acid.

Main uses: used in the preparation of tungsten and its compounds.

8. STABILITY AND REACTIVITY

Stability: stability

Forbidden complex: five fluorinated bromine, three chlorine fluoride.

Polymerization hazard: no polymerization

Decomposition products: harmful toxic gases.

9. TOXICOLOGICAL INFORMATION

LD₅₀: rat oral LD₅₀ (mg/kg): 1059



10. DISPOSAL

Nature of waste: industrial solid waste, waste

Waste disposal methods: Disposal by incineration. Reuse containers in places where it can be used or buried in a specified site.

Waste matters needing attention: prior to the disposal of the state and local regulations should be referred to the relevant regulations.

11. TRANSPORTATION INFORMATION

Transport note: shipment to complete the packing, loading should be safe. To ensure that the container does not leak, do not fall, do not damage. With no halide, halide, edible chemicals, such as mixed transport. Transportation should prevent direct-sun exposure, rain, high temperature resistant. Vehicle transport should be thoroughly cleaned. Road transport should be in accordance with the provisions of the road.

12. REGULATORY INFORMATION

The following laws and regulations and standards for the safe use of chemicals, storage, transportation, loading and unloading, classification and marking and other aspects have made the corresponding provisions:

People's Republic of China production safety law (by June 29, 2002 ninth twenty-eighth meeting of the NPC Standing Committee);

People's Republic of China occupation disease prevention law (by October 27, 2001 ninth twenty-fourth meeting of the NPC Standing Committee);

People's Republic of China Environmental Protection Act (December 26, 1989 seventh session of the Standing Committee of the Eleventh National People's Congress adopted);

Workplace harmful factors occupational exposure limits (2-2002 GBZ).

13. THE SUPPLIER'S INFORMATION

Supplier's Name: Chinatungsten Online (Xiamen) Manu. & Sales Corp.

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14. EMERGENCY INFORMATION

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