

GHS Safety Data Sheet

SDS No. : WWO01PAEG

Date Issued:2004/12/7

Last updated: 2015/05/18

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

Product name: WO₃ Tungsten(VI) oxide

Product number:	Purity	Form	Size (mm) or Shape
WWO03PB	99.9%(3N)	powder	—
WWO04PB	99.99%(4N)	powder	—
WWO02GB	99.9%(3N)	grains	—
WWO03GB	99.99%(4N)	grains	—
—	99.9%(3N)	rod/tablet	10dx5 20dx5 2dx4.5, Various sizes
—	99.9%(3N)	target	101.6dx5 152.4dx5, Various sizes

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.

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Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Acute toxicity (oral) : Category 4	No data available.	Flammable solids : Not classified Pyrophoric solids : Not classified Self-heating substances and mixtures : Not classified Substances and mixtures which, in contact with water, emit flammable gases : Not classified

GHS Label: W



Pictograms or symbols

Warning word: **Warning**

Hazard information

Harmful if swallowed

Description of precaution

Wear protective gloves/protective clothing/eye protection/respiratory protection/face protection during handling.

Avoid breathing dust/mist/gas/fume/vapors/spray.

Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Dispose of contents/ container in accordance with local / national regulations.

Additional hazard information : Hazards mainly originate in dusting.

With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

Chemical or common name:	Tungsten(VI) oxide
Chemical formula:	WO ₃
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	1314-35-8
RTECS#:	YO7760000
TSCA inventory:	listed
EINECS:	2152314

Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.

Section 5. Fire fighting measures

Extinguishing media:	This product cannot catch fire. Use media appropriate for surrounding fire.
Fire fighting	Self-contained breathing apparatus and full protective clothing should be used, if this product is involved in fire.
Explosion hazards:	Dust explosion; No data available.

Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/dusts.
Environmental hazard precautions:	Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect.
Method for containment and cleaning up:	Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Gather up, pack in closed container as much as possible. Carefully collect remnant and move to a safe place.

Section 7. Handling and storage**Precautions to be taken in handling:**

Safe handling:	Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen.
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Precautions to be taken in storage:

General precautions: Store in a cool, dry place away from incompatible materials.
Keep container or bottle tightly closed.

Section 8. Exposure controls / personal protection

Exposure guideline: : ACGIH (2013): Tungsten and insoluble compounds
TLV-TWA 5 mg/m³, TLV-STEL 10 mg/m³

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, face shields, protective gloves

Section 9. Physical and chemical properties

Color and Form: Yellow solid, odorless.

Chemical formula: WO₃

Atomic weight: 231.8

Melting point: 1473 °C

Boiling point: 1837 °C

Density: 7.2 g/cm³

Water solubility Insoluble

Flammable: non-flammable substance

Oxidation: None

Section 10. Stability and reactivity

Stability: Stable under room temperature.

Reactivity

Incompatibility: Incompatible with bromine. Reacts violently with bromine pentafluoride or chlorine trifluoride. Reacts initially with lithium at 200°C resulting in a rapid and violent exotherm.

Condition to avoid: Heat

Section 11. Toxicological information

Acute toxicity: GHS (Oral) ; Category 4 : Harmful if swallowed
Oral rat LD₅₀ = 840 mg/kg (ATSDR(2005))

Skin corrosive / irritation: GHS : No data available.

Serious eyes damage / eye irritation: GHS : No data available.

Respiratory sensitization: GHS : No data available.

Skin sensitization: GHS : No data available.

Germ cell mutagenicity: GHS : No data available

Carcinogenicity: GHS : No data available.

Reproductive toxicity: GHS : No data available.

Specific target organ toxicity

—single exposure: GHS : No data available.

—repeated exposure: GHS : No data available.

Aspiration hazard: GHS ; No data available

Other cautions: Mechanical stimulation by dust affects eyes, skin and respiratory system.

Section 12. Ecological information

Ecotoxicity:

Hazards to the aquatic environment

—acute toxicity: GHS : No data available

—chronic toxicity: GHS : No data available

Hazardous the ozone layer: GHS ; No data available

No Freon or Halon

Fish toxicity: No data available

Degradability: No data available

Bioaccumulative potential:

Ingredients Name	Biological half-life (day)	Rate of absorption	
		oral	respiratory tract
W	1	0.1	0.3

Section 13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN classification: Non-hazards

UN number: None

HS code: 2825.90

Marine pollution: None

Precautions: Container should be transported in a secure position, in a well-ventilated vehicle.

Section 15. Regulatory information

TSCA inventory : listed.

Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.