

## GHS Safety Data Sheet

MSDS No. : WWH02XAEG

Date Issued: 2017/03/09

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

#### 1.1 Product Information

Product name: WCl<sub>5</sub> Tungsten(V) chloride, anhydrous

Product number:	Purity	Form	Size or Shape
WWH02XB	99.99%(4N)	solid	—
—	99.999%(5N)	solid	—

#### 1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd  
 1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284  
 Phone: +81-49-284-1511 Fax: +81-49-284-1351  
 Emergency Phone : +81-49-284-1511

### Section 2. Hazards identification

#### GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Skin corrosion/ irritation: Category 2 Serious eye damage/eye irritation : Category 2 Specific target organ toxicity, single exposure: Category 3	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 Oxidizing solids : Not classified

GHS Label : W



Pictograms or symbols

Warning word: WARNING

Hazard information	Description of precaution
Causes skin irritation Causes serious eye irritation. May cause respiratory irritation	Wear protective gloves/protective clothing/eye protection /respiratory protection/face protection during handling. Avoid breathing dust/mist/gas/fume/vapours/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Take off the contaminated clothing and wash before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Remove immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell. Protect from sunlight. Store in a cool, dry and well ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/ container in accordance with local/national regulations.

Additional hazard information : With respect to additional hazard information, see Section 11.

**Section 3. Composition / information on ingredients**

Chemical or common name:	Tungsten(V) chloride
Synonyms:	Tungsten pentachloride
Chemical formula:	WCl <sub>5</sub>
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	13470-14-9
RTECS#:	not listed
TSCA inventory:	not listed
EINECS:	not listed

**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:	The product is nonflammable. Use media appropriate for surrounding fire.
Fire fighting:	Wear self contained breathing apparatus and protective clothing for fire fighting if necessary. In case of fire, the product may liberate irritating gases/ fume.

**Section 6. Accidental release measures**

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dust/ fume.
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.
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): No data available OSHA (2006) : No data available
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, protective gloves, including boots.

### Section 9. Physical and chemical properties

Color and Form:	Black solid
Chemical formula:	WCl <sub>5</sub>
Formula weight:	361.1
Melting point:	248 °C
Boiling point:	275.6 °C
Density:	3.88 g/cm <sup>3</sup>
Water solubility	Hydrolyzed
Flammable:	No data available
Oxidation:	None

### Section 10. Stability and reactivity

Stability:	Stable in a dry atmosphere under room temperature.
Reactivity:	Hydrolyzed on exposure to water or moisture. Heating in air forms tungsten oxychloride.
Condition to avoid:	Water, moisture, air
Incompatibility:	Bases

### Section 11. Toxicological information

Acute toxicity :	GHS : No data available
Skin corrosive / irritation:	GHS : Category 2 ; Causes skin irritation
Serious eyes damage / eye irritation:	GHS : Category 2 ; Causes serious eye irritation
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 : Category 3 ; May cause respiratory irritation
Specific target organ toxicity —repeated exposure:	GHS : No data available
Aspiration hazard:	GHS : No data available

### Section 12. Ecological information

Ecotoxicity:	
Hazards to the aquatic environment	
—acute toxicity:	GHS : No data available
—chronic toxicity:	GHS : No data available

Hazrdous the ozone layer:	GHS : No data available No Freon or Halon
Fish toxicity:	No data available
Degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available

**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 number:	3260
IATA shipping name:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
IATA classification:	Hazardous Class 8 (Corrosive substances)
IATA packing group:	II
HS code:	2827.39
Marine pollution:	None

**Section 15. Regulatory information**

TSCA inventory : not 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.