

GHS Material Safety Data Sheet

MSDS No. : HOE01GAEG

Date Issued: 2011/04/04

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

1.1 Product Information

Product name: Holmium

Product number:	Purity	Form	Size (mm) or Shape
HOE01GB	99.9%(3N)	grains	
HOE02GB	99.9%(3N)	turnings	
HOE01CB	99.9%(3N)	chips	5×5×t1
HOE02CB	99.9%(3N)	chips	10×10×t1

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd
 1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284
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Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
No data available	No data available	No data available

GHS Label: Not applicable

Pictograms or symbols : Not applicable

Warning word: Not applicable

Hazard information: Not applicable

Description of precaution: Not applicable

Additional hazard information :

Contact with water may liberate flammable gases.

With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

Chemical or common name: Holmium
 Chemical formula: Ho
 Single Substance or Compound: Single substance
 Composition: 100%
 CAS #: 7440-60-0
 RTECS#: not listed
 TSCA inventory: listed
 EINECS: 2311690

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:	Dry sand,Carbon dioxide,Dry chemical powder,Metal fire powder. Do not use water.
Fire fighting:	Contact with water may liberate flammable gases. Remove containers to safe place if possible. Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire.

Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/ 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:	Eliminate all sources of ignition. Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Cover with dry earth, sand or other non-combustible material, and gather up, pack in closed container as much as possible. Carefully collect remnant and move to a safe place. Do not get water inside containers.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling:	Handle the material in a dry inert gas atmosphere, utilizing glove bag or glove box. Keep away from moisture when handling. Keep container or bottle tightly closed when not in use. Handling worker wears suitable protective clothing. Keep away from heat, sparks and naked flame.
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Precautions to be taken in storage:

General precautions: Keep in oil. Keep container or bottle tightly closed.
Protect from sunlight. Store in a cool, dry, well-ventilated area away from incompatible substances.
Keep away from any heat, sparks, and flames.

Section 8. Exposure controls / personal protection

Exposure guideline: ACGIH (2008): No data available
OSHA (2006): No data available

Facility measures: Dry and controlled environment that can use inert gas.
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.

Section 9. Physical and chemical properties

Color and Form: Silver white solid, odorless.

Chemical formula: Ho

Atomic weight: 164.93

Melting point: 1474 °C

Boiling point: 2695 °C

Density: 8.795g/cm³

Water solubility: Water: Slowly soluble in cold water. Soluble in hot water generating hydrogen gas.
Dissoluble: Acids.

Flammability: No data available

Oxidation: None

Others: May decompose on exposure to air and moisture.

Section 10. Stability and reactivity

Stability: Stable in closed container under inert gas.

Reactivity

Incompatibility: Strong acids, strong oxidizing agent.

Condition to avoid: Air, moisture.

Section 11. Toxicological information

Acute toxicity: GHS ; No data available

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
Specific target organ toxicity — repeated exposure:	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
Hazards to the aquatic environment — chronic toxicity:	GHS ; No data available
Fish toxicity:	No data available
Degradability:	No data available
Bioaccumulative potential:	No data available
Ozone layer:	No Freon or Halon

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:	not hazardous
UN number:	not hazardous
HS code:	2805.30
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.