

# **SAFETY DATA SHEET**

Revision Date 29-March-2024 Revision Number 3

# 1. Identification

Product Name Holmium foil

Cat No.: 00596

**CAS-No** 7440-60-0

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

## Details of the supplier of the safety data sheet

#### Company

## Importer/Distributor

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

#### **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

Classification

WHMIS 2015 Classification Not classified under the Hazardous Products Regulations (SOR/2015-17)

Based on available data, the classification criteria are not met

## Label Elements

None required

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Holmium	7440-60-0	99.9

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## 4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention.

**Inhalation** Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Get medical attention.

**Ingestion** Clean mouth with water. Get medical attention.

Most important symptoms/effects
Notes to Physician

No information available. Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

Upper Lower No data available
No data available

No information available

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

## **Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

## **Hazardous Combustion Products**

None known.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health<br/>0FlammabilityInstabilityPhysical hazards<br/>000N/A

#### 6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required.

**Environmental Precautions** See Section 12 for additional Ecological Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal.

Up

## 7. Handling and storage

Handling Avoid contact with skin and eyes. Do not breathe dust.

Storage. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep under

nitrogen. Incompatible Materials. Acids. Halogens.

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## 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

**Engineering Measures** None under normal use conditions.

#### Personal protective equipment

**Eye Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	See manufacturers	-	Splash protection only
	recommendations		

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

#### **Respiratory Protection**

No protective equipment is needed under normal use conditions.

Recommended Filter type: Particle filter

#### **Environmental exposure controls**

No information available.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## Physical and chemical properties

Physical State Solid Appearance Grey

Odor

Odor Threshold

PH

No information available

No information available

No information available

Melting Point/Range1474 °C / 2685.2 °FBoiling Point/Range2695 °C / 4883 °FFlash PointNo information available

Evaporation Rate Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNot applicable

Specific Gravity No information available

Solubility No information available

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Partition coefficient; n-octanol/water

No data available No information available **Autoignition Temperature Decomposition Temperature** No information available **Viscosity** Not applicable

**Molecular Formula** Ηо **Molecular Weight** 164.93

# 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

Stable under normal conditions. Stability

**Conditions to Avoid** Excess heat. Exposure to air. Incompatible products. Exposure to moist air or water.

**Incompatible Materials** Acids, Halogens

Hazardous Decomposition Products None under normal use conditions

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

No acute toxicity information is available for this product

**Acute Toxicity** 

**Product Information** 

**Component Information** 

**Toxicologically Synergistic** 

**Products** 

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

No information available Sensitization

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Holmium	7440-60-0	Not listed				

No information available **Mutagenic Effects** 

**Reproductive Effects** No information available.

No information available. **Developmental Effects** 

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

No information available Aspiration hazard

Symptoms / effects,both acute and No information available

delayed

**Endocrine Disruptor Information** No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

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# 12. Ecological information

**Ecotoxicity** 

Do not empty into drains.

Persistence and Degradability Insoluble in water

**Bioaccumulation/ Accumulation**No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

## 13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

	14. Transport information
DOT	Not regulated
DOT TDG	Not regulated
<u>IATA</u>	Not regulated
IMDG/IMO	Not regulated

## 15. Regulatory information

#### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Holmium	7440-60-0	-	Х	Х	ACTIVE	231-169-0	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Holmium	7440-60-0	-	-	Х	-	X	-	-	-

## Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

## Other International Regulations

Authorisation/Restrictions according to EU REACH Not applicable

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

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Not applicable

Not applicable

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			Pollutant	Potential	Hazardous Substances (RoHS)
Holmium	7440-60-0	Not applicable	Not applicable	Not applicable	Not applicable
			·		
0	CACNA	Seveso III Directive	Seveso III Directive	Dettendens	Danel Commention
Component	CAS-No	(2012/18/EC) -	(2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Component	CAS-NO	(2012/18/EC) -		Convention (PIC)	
Component	CAS-NO	(2012/18/EC) -	(2012/18/EC) -	Convention (PIC)	

## 16. Other information

Not applicable

Product Safety Department **Prepared By** 

7440-60-0

Email: chem.techinfo@thermofisher.com

Not applicable

www.thermofisher.com

29-March-2024 **Revision Date Print Date** 29-March-2024

**Revision Summary** New emergency telephone response service provider.

#### **Disclaimer**

Holmium

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**