

SAFETY DATA SHEET

Revision Date 29-Mar-2024 Revision Number 3

1. Identification

Product Name Holmium foil

Cat No.: 10211

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

Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757

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

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

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

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 ContactWash 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 and

effects

No information available.

No information available

Notes to Physician

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 No data available
Lower No data 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 Flammability Instability Physical hazards
0 0 N/A

6. Accidental release measures

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

Environmental PrecautionsSee 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.

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/face 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.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection No protective equipment is needed under normal use conditions.

Recommended Filter type: Particle filter.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Solid Appearance Grey

OdorNo information availableOdor ThresholdNo information available

pHNo information availableMelting 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 available

Vapor Density Not applicable

Specific Gravity

Solubility

Partition coefficient: n-octanol/water

No information available
No data available

Partition coefficient; n-octanol/waterNo data availableAutoignition TemperatureNo information availableDecomposition TemperatureNo information available

Viscosity Not applicable

Molecular Formula Ho Molecular Weight 164.93

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

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

Acute Toxicity

Product Information

No acute toxicity information is available for this product

Component Information

Toxicologically Synergistic

No information available

Products

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

Irritation No information available

Sensitization No information available

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				

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental EffectsNo information available.

Teratogenicity No information available.

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

Aspiration hazard No information available

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.

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. Tra	ansport	information	on
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DOTNot regulatedTDGNot regulatedIATANot regulatedIMDG/IMONot regulated

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Holmium	7440-60-0	X	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Holmium	7440-60-0	-	Х	231-169-0	-	Χ		-	-	-

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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and No.

Not applicable

Health Administration

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Holmium	7440-60-0	-	-	-

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Holmium	7440-60-0	Not applicable	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Other International Regulations

Γ	Component	CAS No	Seveso III Directive	Seveso III Directive	Rotterdam	Basel Convention
1			(2012/18/EC) -	(2012/18/EC) -	Convention (PIC)	(Hazardous Waste)
			Qualifying Quantities	Qualifying Quantities		
1			for Major Accident	for Safety Report		
L			Notification	Requirements		
	Holmium	7440-60-0	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By Health, Safety and Environmental Department

Email: chem.techinfo@thermofisher.com

www.thermofisher.com

Revision Date 29-Mar-2024 Print Date 29-Mar-2024

Revision Summary New emergency telephone response service provider.

Disclaimer

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