

SAFETY DATA SHEET

Creation Date 07-February-2018 Revision Date 30-March-2024

Revision Number 3

1. Identification

Product Name Tantalum foil

Cat No.: 78342

CAS-No 7440-25-7

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

Hazard Statements

Precautionary Statements

2	Composition/Information on Ingredien	tc
· • • • • • • • • • • • • • • • • • • •	COHDOSHIOH/IIIIOHIAHOH OH IHOLEGIEH	

Component CAS-No Weight %			
	Component	CAS-No	Weight %

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Tantalum	7440-25-7	<=100

4. First-aid measures

General Advice If symptoms persist, call a physician.

Eve 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 plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Clean mouth with water and drink afterwards plenty of water. Get medical attention if Ingestion

symptoms occur.

Most important symptoms/effects

Notes to Physician

Tantalum foil

None reasonably foreseeable.

Treat symptomatically

Fire-fighting measures

Suitable Extinguishing Media approved class D extinguishers. Do not use water or foam.

Unsuitable Extinguishing Media Water may be ineffective

Flash Point No information available Method -No information available

Autoignition Temperature

Explosion Limits

No data available

No information available

Upper 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

Tantalum oxide.

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 Instability Physical hazards **Flammability**

Accidental release measures

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

formation.

Environmental Precautions Should not be released into the environment.

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

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7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid

ingestion and inhalation. Avoid contact with skin, eyes or clothing. Avoid dust formation.

Storage. Keep in a dry place. Keep away from acids. Incompatible Materials. Acids. Oxidizing

agent.

8. Exposure controls / personal protection

Exposure Guidelines

Г	Component	Alberta	British	Ontario TWAEV	Quebec	ACGIH TLV	OSHA PEL	NIOSH
			Columbia					
Г	Tantalum	TWA: 5 mg/m ³	TWA: 5 mg/m ³		TWA: 5 mg/m ³		(Vacated) TWA:	IDLH: 2500
		_			,		5 mg/m ³	mg/m³
							TWA: 5 mg/m ³	TWA: 5 mg/m ³
							Ĭ	STEL: 10 mg/m ³

Legend

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

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 No special protective equipment required

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

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.

9. Physical and chemical properties

Physical StateSolidAppearanceGrey - BlackOdorOdorless

Odor Threshold No information available

pH Not applicable

Melting Point/Range 2996 °C / 5424.8 °F

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Boiling Point/Range 5429 °C / 9804.2 °F **Flash Point** No information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

Tantalum foil

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor DensityNot applicableSpecific Gravity16.69 g/cm3

Solubility
No information available
Partition coefficient; n-octanol/water
No data available

Autoignition Temperature

No information available

Decomposition Temperature

No information available

Viscosity Not applicable

Molecular Formula Ta Molecular Weight 180.95

10. Stability and reactivity

Reactive Hazard Yes

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Acids, Oxidizing agent

Hazardous Decomposition Products Tantalum oxide

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous ReactionsNone under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tantalum	Not listed	Not listed	LC50 > 5.18 mg/L (Rat) 4 h

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

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
Tantalum	7440-25-7	Not listed				

Mutagenic Effects No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

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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.

12. Ecological information

Ecotoxicity

May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability Insoluble in water May persist

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
TDG	Not regulated
IATA	Not regulated
DOT TDG IATA IMDG/IMO	Not regulated

Regulatory information

International Inventories

	Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Γ	Tantalum	7440-25-7	X	-	Х	ACTIVE	231-135-5	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Tantalum	7440-25-7	X	KE-33006	Χ	ı	X	X	X	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

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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

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Tantalum	7440-25-7	Listed	Not applicable	Not applicable	Not applicable
Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Tantalum					

16. Other information

Prepared By Product Safety Department

Email: chem.techinfo@thermofisher.com

www.thermofisher.com

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Revision Summary New emergency telephone response service provider.

Disclaimer

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End of SDS