

SAFETY DATA SHEET

Revision Date 28-March-2024 Revision Number 4

1. Identification

Product Name Gold wire, 14kt, red

Cat No.: 40328

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 %
Gold	7440-57-5	59
Copper	7440-50-8	41

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 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.

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

symptoms occur.

Most important symptoms/effects

Notes to Physician

None reasonably foreseeable.

Treat symptomatically

Fire-fighting measures

Suitable Extinguishing Media approved class D extinguishers.

Unsuitable Extinguishing Media Water may be ineffective

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

No information available

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

Gold oxide. Copper oxides.

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
0FlammabilityInstabilityPhysical hazards
000N/A

6. Accidental release measures

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

formation. No special precautions required.

Environmental Precautions Do not flush into surface water or sanitary sewer system. Should not be released into the

environment. Do not allow material to contaminate ground water system.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Pick up **up** and transfer to properly labelled containers.

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage.

Keep in a dry place. Keep away from acids. Incompatible Materials. .

8. Exposure controls / personal protection

Exposure Guidelines

ſ	Component	Alberta	British	Ontario TWAEV	Quebec	ACGIH TLV	OSHA PEL	NIOSH
			Columbia					
Γ	Copper	TWA: 0.2 mg/m ³	TWA: 1 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³	(Vacated) TWA:	IDLH: 100
-		TWA: 1 mg/m ³	TWA: 0.2 mg/m ³	TWA: 1 mg/m ³	TWA: 1 mg/m ³	_	0.1 mg/m ³	mg/m³
-			•		_		TWA: 0.1 mg/m ³	TWA: 1 mg/m ³
1							TWA: 1 mg/m ³	TWA: 0.1 mg/m ³

<u>Legen</u>d

ACGIH - American Conference of Governmental Industrial Hygienists

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

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

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 State Solid

AppearanceNo information availableOdorNo information availableOdor ThresholdNo information availablepHNot applicable

Melting Point/Range

No data available

Boiling Point/RangeNo information availableFlash PointNo information availableEvaporation RateNot applicable

No information available

Flammability (solid,gas)

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density Not applicable

Specific GravityNo information availableSolubilityNo information availablePartition coefficient; n-octanol/waterNo data available

Autoignition Temperature

No information available

No information available

No information available

Viscosity Not applicable

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials

Hazardous Decomposition Products Gold oxide, Copper oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Oral LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Dermal LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Mist LC50

Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.

Component Information

Component LD50 Oral		LD50 Dermal	LC50 Inhalation
Copper	Not listed	Not listed	LC50 > 5.11 mg/L (Rat) 4 h

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
Ī	Gold	Gold 7440-57-5 Not listed		Not listed	Not listed	Not listed	Not listed
Ī	Copper	7440-50-8	Not listed				

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No 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

Contains a substance which is:. Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Copper	EC50: 0.031 - 0.054 mg/L,	LC50: = 1.25 mg/L, 96h	Not listed	EC50: = 0.03 mg/L, 48h
	96h static	static (Lepomis macrochirus)		Static (Daphnia magna)
	(Pseudokirchneriella	LC50: = 0.3 mg/L, 96h		
	subcapitata)	semi-static (Cyprinus carpio)		
	EC50: 0.0426 - 0.0535	LC50: = 0.8 mg/L, 96h static		
	mg/L, 72h static	(Cyprinus carpio)		
	(Pseudokirchneriella	LC50: = 0.112 mg/L, 96h		
	subcapitata)	flow-through (Poecilia		
	, ,	reticulata)		
		LC50: = 0.052 mg/L, 96h		
		flow-through (Oncorhynchus		
		mykiss)		
		LC50: 0.0068 - 0.0156		
		mg/L, 96h (Pimephales		
		promelas)		
		LC50: < 0.3 mg/L, 96h static		
		(Pimephales promelas)		
		LC50: = 0.2 mg/L, 96h		
		flow-through (Pimephales		
		promelas)		
		,		

Persistence and Degradability May persist

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

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 IATA	Not regulated								
IATA	Not regulated								
IMDG/IMO	Not regulated								
15. Regulatory information									

All of the components in the product are on the following Inventory lists: China X = listed Australia U.S.A. (TSCA) Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) Korea (KECL) China (IECSC) Japan (ENCS) Philippines (PICCS)

International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Gold	7440-57-5	X	-	Х	ACTIVE	231-165-9	-	-
Copper	7440-50-8	X	-	Х	ACTIVE	231-159-6	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Gold	7440-57-5	Х	KE-18083	X	-	X	X	X	X
Copper	7440-50-8	Х	KE-08896	X	-	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

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)).

Component	Canada - National Pollutant Release Inventory (NPRI)	Canadian Environmental Protection Agency (CEPA) - List of Toxic Substances	Canada's Chemicals Management Plan (CEPA)
Copper	Part 1, Group A Substance		

Legend

NPRI - National Pollutant Release Inventory

Other International Regulations

Authorisation/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
Gold	-	Use restricted. See item 75.	-
		(see link for restriction details)	
Copper	-	Use restricted. See item 75.	-
		(see link for restriction details)	

REACH links

https://echa.europa.eu/substances-restricted-under-reach

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)
Gold	7440-57-5	Not applicable	Not applicable	Not applicable	Not applicable
Copper	7440-50-8	Listed	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
		Qualifying Quantities	Qualifying Quantities	` ,	,

		for Major Accident Notification	for Safety Report Requirements		
Gold	7440-57-5	Not applicable	Not applicable	Not applicable	Not applicable
Copper	7440-50-8	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By Product Safety Department

Email: chem.techinfo@thermofisher.com

www.thermofisher.com

Revision Date 28-March-2024 Print Date 28-March-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