

# SAFETY DATA SHEET

## Section 1 - Identification

Product Name Gold leaf micropieces

**CAS No** 7440-57-5

Product Code 98600

Address ThermoFisher Scientific Australia Pty Ltd

5 Caribbean Drive, Scoresby VICTORIA 3179, Australia

Emergency Tel. CHEMTREC®

03 9757 4559 or +613 9757 4559

Telephone / Fax Numbers Tel: 1300 735 292

Fax: 1800 067 639

E-mail address ANZinfo@thermofisher.com

Recommended Use Laboratory chemicals.

Uses advised against This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National

Code of Practice for Chemicals of Security Concern.

# Section 2 - Hazard(s) Identification

### Classification under Safe Work Australia

Classified as not hazardous according to criteria of Safe Work Australia.

Physical hazards

No hazards identified

**Health hazards** 

No hazards identified

**Environmental hazards** 

No hazards identified

<u>Label Elements</u> None required

Other information

# Section 3 - Composition and Information on Ingredients

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 Component
 CAS No
 Weight %

 Gold
 7440-57-5
 >95

### Section 4 - First Aid Measures

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing,

give artificial respiration.

**Ingestion** Do NOT induce vomiting. Get medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

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

medical attention.

**Self-Protection of the First Aider** No special precautions required.

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and

effects

No information available.

Notes to Physician Treat symptomatically.

## Section 5 - Fire Fighting Measures

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Extinguishing media which must not be used for safety reasons

No information available.

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

Thermal decomposition can lead to release of irritating gases and vapors.

### Special protective equipment and precautions for fire fighters

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

### Section 6 - Accidental Release Measures

### **Emergency procedures**

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

#### **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

### Methods for Containment and Clean Up

### Clean-up methods - small spillage

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

### Clean-up methods - large spillage

Not applicable, packaged goods.

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### **Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

# Section 7 - Handling and Storage

#### Precautions for Safe Handling

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

### Conditions for Safe Storage, Including any Incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

## Section 8 - Exposure Controls and Personal Protection

#### Exposure limits

The product does not contain any hazardous materials with occupational exposure limits established.

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

### **Exposure Controls**

### **Engineering Measures**

None under normal use conditions.

### Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) (Australian/New Zealand Standard

AS/NZS 1337 - Eye protectors for Industrial applications)

Hand Protection Protective gloves

Glove material Natural rubber Nitrile rubber	Breakthrough time See manufacturers recommendations	Glove thickness	AUS/NZ Standard AS/NZS 2161	Glove comments (minimum requirement)
Neoprene PVC				

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure 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.

Remove gloves with care avoiding skin contamination.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure

**Repiratory Protection**Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment

must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use

and maintenance of repiratory protective devices

Recommended Filter type: Particle filter (or AUS/NZ equivalent)

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

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Environmental exposure controls No information available.

## Section 9 - Physical and Chemical Properties

### Information on basic physical and chemical properties

AppearanceAmberPhysical StateSolid

**Odor** Odorless

Odor Threshold<br/>pHNo data available<br/>No information availableMelting Point/Range1065 °C / 1949 °FSoftening PointNo data availableBoiling Point/Range2800 °C / 5072 °F

Flash Point No information available Method - No information available

Solid

Evaporation Rate Not applicable Solid

Flammability (solid,gas) No information available

Explosion Limits No data available

Vapor PressureNo data availableVapor DensityNot applicable

Vapor DensityNot applicableSolidSpecific Gravity / DensityNo data available

Bulk Density
No data available
Water Solubility
Insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature

Decomposition Temperature

No data available
No data available

Viscosity Not applicable

Explosive Properties No information available Oxidizing Properties No information available

Other information

Molecular Formula Au Molecular Weight 196.97

# Section 10 - Stability and Reactivity

**Reactivity** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products, Excess heat, Avoid dust formation.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products None under normal use conditions.

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

## Section 11 - Toxicological Information

Information on Toxicological Effects

**Product Information**No acute toxicity information is available for this product

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(a) acute toxicity;

OralNo data availableDermalNo data availableInhalationNo data available

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

**Respiratory Skin**No data available
No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Not applicable

Solid

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

Symptoms / effects,both acute and No information available

delayed

## Section 12 - Ecological Information

**Ecotoxicity effects** 

Persistence and Degradability

Persistence Insoluble in water.

DegradabilityNot relevant for inorganic substances.Bioaccumulative PotentialMay have some potential to bioaccumulate

**Mobility** Spillage unlikely to penetrate soil. Is not likely mobile in the environment due its low water

solubility

Endocrine Disruptor Information Persistent Organic Pollutant

This product does not contain any known or suspected endocrine disruptors

Persistent Organic Pollutant
Ozone Depletion Potential

This product does not contain any known or suspected substance
This product does not contain any known or suspected substance

### Section 13 - Disposal Considerations

Waste from Residues/Unused

**Products** 

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.

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**Contaminated Packaging** 

### SAFETY DATA SHEET

Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information Chemical wastes should be disposed through a licensed commercial waste collection

service.

## Section 14 - Transport Information

IMDG/IMO Not regulated

ADG Not regulated

IATA Not regulated

No hazards identified **Environmental hazards** 

**Special Precautions** No special precautions required

**Additional information** None known

## Section 15 - Regulatory Information

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

**National Regulations** Australia

See section 8 for national exposure control parameters.

### Standard for the Uniform Scheduling of Medicines and Poisons

No poison schedule number allocated.

### **Australian Industrial Chemicals Introduction Scheme (AICIS)**

Component	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Gold - 7440-57-5	Present	-

### Australian - Illicit Drug Precursors/Reagents Substance List

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

### **Chemicals of Security Concern**

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

National pollutant inventory Not applicable

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### Prohibition or notification/licensing requirements

Shown below are details of specific prohibition/notifications or licencing requirements when they apply.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

#### International Inventories

Component	AICS	NZIoC	EINECS	ELINCS	TSCA	DSL	NDSL	PICCS	<b>ENCS</b>	ISHL	IECSC	KECL
Gold	X	Х	231-165-9	-	X	X	-	Х	X		Х	KE-18083

Legend: X - Listed. '-' - Not Listed. KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

**International Regulations** 

Ozone Depletion Potential This product does not contain any known or suspected substance

Persistent Organic Pollutant This product does not contain any known or suspected substance

Rotterdam Convention (PIC) Not applicable

Basel convention on the control of transboundary movements of hazardous wastes and their dispoal Not applicable.

Component	CAS No	OECD HPV	Restriction of	Seveso III Directive	Seveso III Directive
			Hazardous	(2012/18/EC) -	(2012/18/EC) -
			Substances (RoHS)	Qualifying Quantities	Qualifying Quantities
				for Major Accident	for Safety Report
				Notification	Requirements
Gold	7440-57-5	Not applicable	Not applicable	Not applicable	Not applicable

### Authorisation/Restrictions according to EU REACH

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

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

### Section 16 - Other Information

### Legend

AICS - Australian Inventory of Chemical Substances

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

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

IECSC - Chinese Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

NZIoC - New Zealand Inventory of Chemicals

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

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

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

CAS - Chemical Abstracts Service

**ACGIH** - American Conference of Governmental Industrial Hygienists

Predicted No Effect Concentration (PNEC)

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### SAFETY DATA SHEET

ICAO/IATA - International Civil Aviation Organization/International Air

Transport Association

MARPOL - International Convention for the Prevention of Pollution from

NZS 5433:2012 - Transport of Dangerous Goods on Land

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% WEL - Workplace Exposure Limit **DNEL** - Derived No Effect Level

POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

**VOC** - (Volatile Organic Compound)

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

ADG Australian Code for the Transport of Dangerous Goods by Road and Rail

OECD - Organisation for Economic Co-operation and Development

LC50 - Lethal Concentration 50% ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment NOEC - No Observed Effect Concentration

**BCF** - Bioconcentration factor

PBT - Persistent, Bioaccumulative, Toxic

### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

**Revision Date** 18-Nov-2022 **Revision Summary** Not applicable.

This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).

#### 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 Safety Data Sheet**

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