

SAFETY DATA SHEET

Revision Date 02-April-2024 Revision Number 4

1. Identification

Product Name Aluminum rod, alloy 6061

Cat No.: 42051

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 Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Carcinogenicity Category 2

Label Elements

Signal Word

Warning

Hazard Statements

Suspected of causing cancer



Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection

Response

IF exposed or concerned: Get medical advice/attention

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Aluminum	7429-90-5	97.9
Magnesium	7439-95-4	1.0
Silicon	7440-21-3	0.6
Copper	7440-50-8	0.27
Chromium	7440-47-3	0.2

4. First-aid measures

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

Skin Contact Wash off immediately with plenty of water for at least 15 minutes.

Inhalation Remove to fresh air.

Ingestion Do NOT induce vomiting.

Most important symptoms/effects
Notes to Physician

No information available.
Treat symptomatically

5. 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

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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

HealthFlammabilityInstabilityPhysical hazards020W

6. Accidental release measures

Personal Precautions No special precautions required.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Pick up and transfer to properly labelled containers.

Up

7. Handling and storage

Handling Ensure adequate ventilation.

Storage. Keep in a dry place. Keep away from acids.

8. Exposure controls / personal protection

Exposure Guidelines

Component	Alberta	British	Ontario TWAEV	Quebec	ACGIH TLV	OSHA PEL	NIOSH
·		Columbia					
Aluminum	TWA: 10 mg/m ³	TWA: 1.0 mg/m ³	TWA: 1 mg/m ³	TWA: 10 mg/m ³	TWA: 1 mg/m ³	(Vacated) TWA:	TWA: 10 mg/m ³
	TWA: 5 mg/m ³			TWA: 5 mg/m ³		15 mg/m ³	TWA: 5 mg/m ³
						(Vacated) TWA:	
						5 mg/m ³	
						TWA: 15 mg/m ³	
						TWA: 5 mg/m ³	
Silicon		TWA: 10 mg/m ³		TWA: 10 mg/m ³		(Vacated) TWA:	TWA: 10 mg/m ³
		TWA: 3 mg/m ³				10 mg/m ³	TWA: 5 mg/m ³
						(Vacated) TWA:	
						5 mg/m ³	
						TWA: 15 mg/m ³	
						TWA: 5 mg/m ³	
Copper	TWA: 0.2 mg/m ³	TWA: 1 mg/m ³		TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³	,	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
						TWA: 1 mg/m ³	TWA: 0.1 mg/m ³
Chromium	TWA: 0.5 mg/m ³	(Vacated) TWA:	IDLH: 250				
						1 mg/m ³	mg/m³
						TWA: 1 mg/m ³	TWA: 0.5 mg/m ³

Legend

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 special protective equipment required.

When RPE is used a face piece Fit Test should be conducted

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 StateSolidAppearanceSilver / GreyOdorOdorless

Odor Threshold

No information available

No information available

Melting Point/Range 660.4 °C

Boiling Point/Range

Flash Point

Evaporation Rate

Flammability (solid,gas)

No information available
No information available
No information available
No information available

Flammability or explosive limits

Upper No data available
Lower No data available

Vapor PressureNo information availableVapor DensityNo information availableSpecific GravityNo information available

Bulk Density 2.7 g/cm3

Solubility
Partition coefficient; n-octanol/water
Autoignition Temperature
Decomposition Temperature
Viscosity

No information available
No information available
No information available
No information available

10. Stability and reactivity

Reactive Hazard Yes

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous ReactionsNone under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

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.

Vapor LC50

Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aluminum	Not listed	Not listed	LC50 > 0.888 mg/L (Rat) 4 h
Magnesium	LD50 = 230 mg/kg (Rat)	Not listed	Not listed
Silicon	LD50 = 3160 mg/kg (Rat)	Not listed	Not listed
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
Aluminum	7429-90-5	Not listed				
Magnesium	7439-95-4	Not listed				
Silicon	7440-21-3	Not listed				
Copper	7440-50-8	Not listed				
Chromium	7440-47-3	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.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Copper	EC50: 0.031 - 0.054 mg/L, 96h static (Pseudokirchneriella subcapitata) EC50: 0.0426 - 0.0535 mg/L, 72h static (Pseudokirchneriella subcapitata)	LC50: = 1.25 mg/L, 96h static (Lepomis macrochirus) LC50: = 0.3 mg/L, 96h semi-static (Cyprinus carpio) LC50: = 0.8 mg/L, 96h static (Cyprinus carpio) LC50: = 0.112 mg/L, 96h 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)		EC50: = 0.03 mg/L, 48h Static (Daphnia magna)

Persistence and Degradability No information available

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	Not regulated	
IATA	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
Aluminum	7429-90-5	X	-	X	ACTIVE	231-072-3	-	ı
Magnesium	7439-95-4	X	-	X	ACTIVE	231-104-6	•	-
Silicon	7440-21-3	X	-	Х	ACTIVE	231-130-8	-	1
Copper	7440-50-8	X	-	X	ACTIVE	231-159-6	-	ı
Chromium	7440-47-3	X	-	Х	ACTIVE	231-157-5	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Aluminum	7429-90-5	X	KE-00881	X	-	X	X	X	X
Magnesium	7439-95-4	X	KE-22673	X	-	Х	X	X	Х
Silicon	7440-21-3	X	KE-31029	X	-	X	X	X	Х

- 1		7440.50.0								
	Copper	7440-50-8	X	KE-08896	X	-	X	X	X	X
ı	Chromium	7440-47-3	Х	KE-05970	Х	-	X	X	Х	Х

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)
Γ	Aluminum	Part 1, Group A Substance		
Copper Part 1, Group A Substance				
Γ	Chromium	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	
Aluminum	-	Use restricted. See item 75. (see link for restriction details)	-
Copper	-	Use restricted. See item 75. (see link for restriction details)	-
Chromium	-	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)
Aluminum	7429-90-5	Listed	Not applicable	Not applicable	Not applicable
Magnesium	7439-95-4	Listed	Not applicable	Not applicable	Not applicable
Silicon	7440-21-3	Listed	Not applicable	Not applicable	Not applicable
Copper	7440-50-8	Listed	Not applicable	Not applicable	Not applicable
Chromium	7440-47-3	Listed	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	(2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Aluminum	7429-90-5	Not applicable	Not applicable	Not applicable	Not applicable

Magnesium	7439-95-4	Not applicable	Not applicable	Not applicable	Not applicable
Silicon	7440-21-3	Not applicable	Not applicable	Not applicable	Not applicable
Copper	7440-50-8	Not applicable	Not applicable	Not applicable	Not applicable
Chromium	7440-47-3	Not applicable	Not applicable	Not applicable	Not applicable

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

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