

SAFETY DATA SHEET

Revision Date 27-March-2024 Revision Number 4

1. Identification

Product Name Chloromethyl thiocyanate

Cat No. : A12108

CAS-No 3268-79-9

Synonyms Thiocyanic acid, chloromethyl este; Thiocyanate, chloromethyl; Chloromethylthiocyanogen

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)

Flammable liquids

Acute oral toxicity

Acute dermal toxicity

Acute Inhalation Toxicity

Health Hazards Not Otherwise Classified

Category 4

Category 4

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Category 1

Contact with acids liberates very toxic gas

Label Elements

Signal Word

Danger

Hazard Statements

Combustible liquid

Harmful if swallowed, in contact with skin or if inhaled Harmful if inhaled Contact with acids liberates very toxic gas



Precautionary Statements

Prevention

Take any precaution to avoid mixing with acids Do not breathe dust/fumes/gas/mist/vapours/spray

Wear respiratory protection

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER/doctor IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER/ doctor if you feel unwell

Rinse mouth

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

Take off contaminated clothing and wash it before reuse

Storage

Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Chloromethyl thiocyanate	3268-79-9	97

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 soap and plenty of water while removing all contaminated

clothes and shoes.

Inhalation Remove from exposure, lie down. Remove to fresh air.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink

plenty of water. If possible drink milk afterwards.

Most important symptoms/effects Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness,

nausea and vomiting

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water mist may be used to cool closed containers.

No information available Unsuitable Extinguishing Media

Flash Point 83 °C / 181.4 °F

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

Combustible material. Containers may explode when heated.

Hazardous Combustion Products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO2). Sulfur oxides. Hydrogen cyanide (hydrocyanic acid). Hydrogen chloride gas.

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
4	2	0	N/A

6. Accidental release measures

Personal Precautions Environmental Precautions Remove all sources of ignition. Take precautionary measures against static discharges. See Section 12 for additional Ecological Information.

Up

Methods for Containment and Clean Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition.

7. Handling and storage

Keep away from open flames, hot surfaces and sources of ignition. Handling

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

heat, sparks and flame. Incompatible Materials. Strong oxidizing agents. Strong bases.

Alcohols. Amines.

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 Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control

hazardous materials at source

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) Goggles

Hand Protection Protective gloves

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

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) 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. gloves with care avoiding skin contamination.

Respiratory Protection

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** Organic gases and vapours filter Type A Brown conforming to EN14387

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

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 StateLiquidAppearanceLight yellowOdorOdorless

Odor Threshold
pHNo information available
No information availableMelting Point/RangeNo data available

Boiling Point/Range 76 - 78 °C / 168.8 - 172.4 °F @ 15 mmHg

Flash Point 83 °C / 181.4 °F
Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density 3.71 Specific Gravity 1.370

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

Autoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

Molecular FormulaC2 H2 CI N SMolecular Weight107.56

10. Stability and reactivity

Chloromethyl thiocyanate

Reactive Hazard Yes

Stability Stable under normal conditions. Moisture sensitive.

Conditions to Avoid Excess heat. Exposure to moist air or water. Keep away from open flames, hot surfaces

and sources of ignition.

Incompatible Materials Strong oxidizing agents, Strong bases, Alcohols, Amines

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Sulfur oxides,

Hydrogen cyanide (hydrocyanic acid), Hydrogen chloride gas

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information 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.

Con	mponent	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Chlo	oromethyl	3268-79-9	Not listed				
thio	ocyanate						

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

delayed

Endocrine Disruptor Information No information available

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

12. Ecological information

Symptoms / effects,both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Ecotoxicity

Do not empty into drains.

Persistence and Degradability Persistence is unlikely based on information available.

Revision Date 27-March-2024

Bioaccumulation/ Accumulation No information available.

Will likely be mobile in the environment due to its volatility. Mobility

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

UN-No UN2810

Proper Shipping Name TOXIC LIQUIDS, ORGANIC, N.O.S.

Hazard Class 6.1 **Packing Group** Ш

TDG

UN2810 **UN-No**

Proper Shipping Name Toxic liquid, organic, n.o.s.

Hazard Class 6.1 **Packing Group** Ш

IATA

UN2810 **UN-No**

Proper Shipping Name Toxic liquid, organic, n.o.s.

Hazard Class 6.1 **Packing Group**

IMDG/IMO

UN-No UN2810

Proper Shipping Name Toxic liquid, organic, n.o.s.

Hazard Class Packing Group Ш

15. Regulatory information

International Inventories

	Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Γ	Chloromethyl thiocyanate	3268-79-9	-	-	-	-	221-883-0	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Chloromethyl thiocyanate	3268-79-9	-	-	Х	Х	Х	-	X	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)).

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)
Chloromethyl thiocyanate	3268-79-9	Not applicable	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)
Chloromethyl thiocyanate	3268-79-9	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

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End of SDS