

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**Product Identifier**

Perihalan Produk: **2-Chloroacetamide**  
 Product Description: **2-Chloroacetamide**  
 Cat No. : C14841  
 Synonyms Chloroacetamide; alpha-Chloroacetamide; 2-Chloroethanamide.  
 CAS No 79-07-2  
 Molecular Formula C2 H4 Cl N O

**Relevant identified uses of the substance or mixture and uses advised against**

Recommended Use Laboratory chemicals.  
 Uses advised against No Information available

**Company**

Thermo Fisher Scientific Fisher Scientific (M) Sdn Bhd  
 Hap Seng Business Park, Lot 01-03, 01-04 Aras 1 Unity Square,  
 No 12, Persiaran Perusahaan, Seksyen 23, 40300 Shah Alam,  
 Selangor Darul Ehsan, Malaysia.  
 Main line: +60 3-5525 7888

**Supplier**

E-mail address Enquiry.my@thermofisher.com

**Emergency Telephone Number**

Tel: +03-5525 7888  
 CHEMTREC Malaysia **1-800-815-308** (Malay)  
 CHEMTREC Malaysia (Kuala Lumpur) **+(60)-327884561** (Malay)

**SECTION 2: HAZARDS IDENTIFICATION**
**Classification of the substance or mixture**

Acute oral toxicity	Category 3 (H301)
Skin Sensitization	Category 1 (H317)
Reproductive Toxicity	Category 2 (H361f)

**Label Elements**


Signal Word

Danger

# SAFETY DATA SHEET

2-Chloroacetamide

Revision Date 31-Mar-2025

## Hazard Statements

H301 - Toxic if swallowed  
H317 - May cause an allergic skin reaction  
H361f - Suspected of damaging fertility

## Precautionary Statements

### Prevention

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P280 - Wear protective gloves

### Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P308 + P313 - IF exposed or concerned: Get medical advice/attention  
P330 - Rinse mouth  
P362 + P364 - Take off contaminated clothing and wash it before reuse

### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up

### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

## Other Hazards

May form combustible dust concentrations in air

May form explosible dust-air mixture if dispersed

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
2-Chloroacetamide	79-07-2	<=100

## SECTION 4: FIRST AID MEASURES

### Description of first aid measures

#### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

#### Eye Contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

#### Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately.

#### Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

# SAFETY DATA SHEET

2-Chloroacetamide

Revision Date 31-Mar-2025

Immediate medical attention is required.

**Self-Protection of the First Aider** Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

**Most important symptoms and effects, both acute and delayed**

May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

**Extinguishing media**

**Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam.

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

No information available.

**Special hazards arising from the substance or mixture**

Fine dust dispersed in air may ignite.

**Hazardous Combustion Products**

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Ammonia, Hydrogen chloride gas.

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**Environmental precautions**

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

**Methods and Material for Containment and Cleaning Up**

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

**Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

# SAFETY DATA SHEET

2-Chloroacetamide

Revision Date 31-Mar-2025

## Precautions for Safe Handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

## Conditions for Safe Storage, Including any Incompatibilities

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

## Specific End Uses

Use in laboratories.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Component	European Union	The United Kingdom	Germany
2-Chloroacetamide			Haut

### Exposure Controls

#### 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**

Goggles

##### **Hand Protection**

Protective gloves

##### **Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure

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 compatibility, 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.

##### **Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

##### **Recommended Filter type:**

Particulates filter conforming to EN 143

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

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

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

### Environmental exposure controls

No information available

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

# SAFETY DATA SHEET

2-Chloroacetamide

Revision Date 31-Mar-2025

## Information on basic physical and chemical properties

Appearance	White	
Physical State	Powder Solid	
Odor	Odorless	
Odor Threshold	No data available	
pH	3.5	100 g/L (20°C)
Melting Point/Range	116 - 120 °C / 240.8 - 248 °F	
Softening Point	No data available	
Boiling Point/Range	224.5 °C / 436.1 °F	@ 760 mmHg
Flash Point	170 °C / 338 °F	Method - No information available
Evaporation Rate	Not applicable	Solid
Flammability (solid,gas)	No information available	
Explosion Limits	No data available	
Vapor Pressure	907 hPa @ 20 °C	
Vapor Density	Not applicable	Solid
Specific Gravity / Density	0.840	
Bulk Density	No data available	
Water Solubility	90 g/L (20°C)	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Component	log Pow	
2-Chloroacetamide	-0.63	
Autoignition Temperature	Not applicable	
Decomposition Temperature	> 117°C	
Viscosity	Not applicable	Solid
Explosive Properties	No information available	
Oxidizing Properties	No information available	
Molecular Formula	C2 H4 Cl N O	
Molecular Weight	93.51	

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

None known, based on information available.

### Chemical Stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

Hazardous Polymerization	No information available.
Hazardous Reactions	None under normal processing.

# SAFETY DATA SHEET

2-Chloroacetamide

Revision Date 31-Mar-2025

## Conditions to Avoid

To avoid thermal decomposition, do not overheat. Incompatible products.

## Incompatible Materials

Strong oxidizing agents. Strong bases. Strong reducing agents.

## Hazardous Decomposition Products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Ammonia. Hydrogen chloride gas.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Product Information

##### (a) acute toxicity;

Oral

Category 3

Dermal

Based on available data, the classification criteria are not met

Inhalation

Based on available data, the classification criteria are not met

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-Chloroacetamide	LD50 = 138 mg/kg ( Rat )	LD50 > 2000 mg/kg ( Rat )	-

##### (b) skin corrosion/irritation;

No data available

##### (c) serious eye damage/irritation;

No data available

##### (d) respiratory or skin sensitization;

Respiratory

No data available

Skin

Category 1

No information 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;

Category 2

##### (h) STOT-single exposure;

No data available

##### (i) STOT-repeated exposure;

No data available

Target Organs

None known.

# SAFETY DATA SHEET

2-Chloroacetamide

Revision Date 31-Mar-2025

(j) aspiration hazard; Not applicable  
Solid

**Symptoms / effects, both acute and delayed** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity effects** Do not empty into drains. .

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
2-Chloroacetamide				EC50 = 10.3 mg/L 5 min EC50 = 19.5 mg/L 15 min EC50 = 31.7 mg/L 30 min

**Persistence and degradability**  
**Persistence** Soluble in water, Persistence is unlikely, based on information available.

**Bioaccumulative potential** Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
2-Chloroacetamide	-0.63	No data available

**Mobility in soil** The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

**Other adverse effects** No information available

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste treatment methods**  
**Waste from Residues/Unused Products** Waste is classified as hazardous Dispose of in accordance with the European Directives on waste and hazardous waste Dispose of in accordance with local regulations

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

**Other Information** Waste codes should be assigned by the user based on the application for which the product was used Do not empty into drains

## SECTION 14: TRANSPORT INFORMATION

**IMDG/IMO**  
**UN-No** UN2811  
**Hazard Class** 6.1  
**Packing Group** III

ALFAAC14841

# SAFETY DATA SHEET

2-Chloroacetamide

Revision Date 31-Mar-2025

**Proper Shipping Name** Toxic solid, organic, n.o.s.

## Road and Rail Transport

**UN-No** UN2811  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** Toxic solid, organic, n.o.s.

## IATA

**UN-No** UN2811  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** TOXIC SOLID, ORGANIC, N.O.S.\*

**Special Precautions for User** No special precautions required

## SECTION 15: REGULATORY INFORMATION

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

**International Inventories** X = listed

Component	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	IECSC	AICS	KECL
2-Chloroacetamide	201-174-2	X	X	X	X	X	X	X	KE-05491

### National Regulations

**Persistent Organic Pollutant** This product does not contain any known or suspected substance  
**Ozone Depletion Potential** This product does not contain any known or suspected substance

## SECTION 16: OTHER INFORMATION

### Legend

**CAS** - Chemical Abstracts Service

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

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

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

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

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

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

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

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

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**POW** - Partition coefficient Octanol:Water

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

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

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

ALFAAC14841



# SAFETY DATA SHEET

2-Chloroacetamide

Revision Date 31-Mar-2025

OECD - Organisation for Economic Co-operation and Development  
BCF - Bioconcentration factor

ATE - Acute Toxicity Estimate  
VOC - (Volatile Organic Compound)

## Key literature references and sources for data

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

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

Prepared By	Health, Safety and Environmental Department
Revision Date	31-Mar-2025
Revision Summary	SDS sections updated.

**In accordance with local and national regulations: Occupational Safety and Health  
(Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013**

## 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**