

# Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

## 1 Identification

- **Product identifier**
- **Trade name:** 2-chloroacetamide
- **CAS Number:**  
79-07-2
- **Other means of identification**
- **EC number:**  
201-174-2
- **Index number:**  
616-036-00-0
- **Product Description:** Protein alkylating agent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
ReSyn Biosciences Pty Ltd  
Building 20  
CSIR  
Meiring Naude Road  
Brummeria  
Pretoria  
South Africa  
0184  
+2763 358 5538
- **Emergency telephone number:** +2763 358 5538

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute toxicity - oral 3 H301 Toxic if swallowed.



GHS08 Health hazard

Reproductive toxicity 2 H361 Suspected of damaging fertility or the unborn child.



GHS07

Sensitization - skin 1 H317 May cause an allergic skin reaction.

- **Label elements**

- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS06



GHS07



GHS08

- **Signal word** Danger

(Contd. on page 2)

# Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

Trade name: 2-chloroacetamide

(Contd. of page 1)

· **Hazard-determining components of labeling:**

2-chloroacetamide

· **Hazard statements**

Toxic if swallowed.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

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

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Rinse mouth.

If on skin: Wash with plenty of water.

If exposed or concerned: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.

0 % of the mixture consists of component(s) of unknown toxicity.

· **Information pertaining to particular dangers for man and environment:**

· **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



HEALTH 2 Health = 2

FIRE 1 Fire = 1

REACTIVITY 0 Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Classification according to (d)(1)(ii) of § 1910.1200**

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

· **Hazards not otherwise classified (HNOC)**

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

(Contd. on page 3)

## Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

Trade name: 2-chloroacetamide

(Contd. of page 2)

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**  
79-07-2 2-chloroacetamide
- **Identification number(s)**
- **EC number:** 201-174-2
- **Index number:** 616-036-00-0

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
If skin irritation occurs, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.  
If eye irritation occurs, consult a doctor.
- **After swallowing:**  
Do not induce vomiting; immediately call for medical help.  
Get medical attention immediately.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
Use fire fighting measures that suit the environment.  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**  
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers / surface or ground water.
- **Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.
- **Protective Action Criteria for Chemicals**  
Protective Action Criteria (PACs) are essential components for planning and response to uncontrolled releases of hazardous chemicals.

(Contd. on page 4)



## Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

Trade name: 2-chloroacetamide

(Contd. of page 3)

**PAC-1:**

PAC 1: Mild, transient health effects.

Substance is not listed.

**PAC-2:**

PAC 2: Irreversible or other serious health effects that could impair the ability to take protective action.

Substance is not listed.

**PAC-3:**

PAC 3: Life-threatening health effects.

Substance is not listed.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

**Precautions for safe handling**

Prevent formation of dust.

Work under hood. Do not inhale substance/mixture.

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

**Information about protection against explosions and fires:** Keep respiratory protective device available.**Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:**

Keep out of reach of children.

Store in a cool, dry place.

Store in a well-ventilated place.

Keep container tightly closed.

Keep locked up or in an area accessible only to qualified or authorized persons.

**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:** Keep receptacle tightly sealed.**Storage class:**

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

**Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

**Control parameters****Components with limit values that require monitoring at the workplace:**

Contains no substances with occupational exposure limit values.

**Additional information:** The lists that were valid during the creation of this SDS were used as basis.**Exposure controls**

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Where acceptable concentrations cannot be maintained by general mechanical ventilation, local exhaust ventilation is recommended.

**Appropriate engineering controls** No further data; see section 7.

(Contd. on page 5)

# Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

Trade name: 2-chloroacetamide

(Contd. of page 4)

- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.
- **Breathing equipment:**  
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

- **Material of gloves**  
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**  
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.
- **Body protection:**



Protective work clothing

- **Limitation and supervision of exposure into the environment** None

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Solid
- **Color:** White
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **Melting point/Melting range:** 121 °C (249.8 °F)
- **Boiling point/Boiling range:** 224.5 °C (436.1 °F)
- **Flammability:** Product is not flammable.
- **Explosion limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** 170 °C (338 °F)
- **Decomposition temperature:** Not determined.
- **pH-value:** Not applicable.
- **Viscosity:**
- **Kinematic:** Not applicable.
- **Dynamic:** Not applicable.
- **Solubility in / Miscibility with**
- **Water at 20 °C (68 °F):** 90 g/l
- **Partition coefficient (n-octanol/water):** Not determined.
- **Vapor pressure at 20 °C (68 °F):** 907 hPa (680.3 mm Hg)
- **Density at 20 °C (68 °F):** 0.84 g/cm<sup>3</sup> (7.0098 lbs/gal)

(Contd. on page 6)



# Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

Trade name: 2-chloroacetamide

(Contd. of page 5)

- **Relative density** Not determined.
- **Vapor density** Not applicable.
- **Particle characteristics** Not determined.
- **Other information**
- **Appearance:**
- **Form:** Powder
- **Important information on protection of health and environment, and on safety.**
- **Ignition temperature:** Not determined.
- **Danger of explosion:** Product does not present an explosion hazard.
- **VOC content:** 0.00 %
- **Solids content:** 100.0 %
- **Change in condition**
- **Oxidizing properties** None

## 10 Stability and reactivity

- **Reactivity**  
Forms explosive mixtures with air on intense heating.  
A range from approx. 15 Kelvin below the flash point is to be rated as critical.  
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
- **Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**  
Increased reactivity with:  
Reacts with strong acids.  
Reacts with oxidizing agents.  
Reacts with reducing agents.  
Reacts with strong alkali.
- **Conditions to avoid** Strong heating.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

### · Information on toxicological effects

#### · Acute toxicity:

#### · LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)		
Oral	LD50	155 mg/kg (mouse)

79-07-2 2-chloroacetamide		
Oral	LD50	155 mg/kg (mouse)

#### · Primary irritant effect:

· **on the skin:** No irritant effect.· **on the eye:** No irritating effect.· **Sensitization:** Sensitization possible through skin contact.

#### · Additional toxicological information:

· **Interactive effects** No interactive effects between components are known.

#### · Carcinogenic categories

· **IARC (International Agency for Research on Cancer)** Substance is not listed.

(Contd. on page 7)

# Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

Trade name: 2-chloroacetamide

(Contd. of page 6)

- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.
- **Alternative sources for toxicological information** No non-standard sources for toxicological information were used.

## \*12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

**79-07-2 2-chloracetamide**

EC50 14 mg/kg (daphnia)

- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects**
- **Additional ecological information:**
- **General notes:**  
 Water hazard class 2 (Assessment by list): hazardous for water  
 Do not allow product to reach ground water, water course or sewage system.  
 Danger to drinking water if even small quantities leak into the ground.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
 Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- **UN-Number** UN2811
- **DOT, IMDG, IATA**
- **UN proper shipping name** Toxic solids, organic, n.o.s. (2-chloracetamide)
- **DOT** TOXIC SOLID, ORGANIC, N.O.S. (2-chloracetamide)
- **IMDG** Toxic solid, organic, n.o.s. (2-chloracetamide)
- **IATA**
- **Transport hazard class(es)**
- **DOT**



- **Class** 6.1 Toxic substances

(Contd. on page 8)

# Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

Trade name: 2-chloroacetamide

(Contd. of page 7)

· **Label** 6.1

· **IMDG, IATA**



· **Class** 6.1 Toxic substances

· **Label** 6.1

· **Packing group**

· **DOT, IMDG, IATA** III

· **Environmental hazards:** Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**

· **Quantity limitations** On passenger aircraft/rail: 100 kg  
On cargo aircraft only: 200 kg

· **IMDG**

· **Limited quantities (LQ)** 5 kg

· **Excepted quantities (EQ)** Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

· **Special precautions for user** Warning: Toxic substances

· **Hazard identification number (Kemler code):** 60

· **EMS Number:** F-A, S-A

· **Stowage Category** A

· **UN "Model Regulation":** UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (2-CHLORACETAMIDE), 6.1, III

## 15 Regulatory information

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

No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):** Substance is not listed.

· **Section 313 (Specific toxic chemical listings):** Substance is not listed.

· **TSCA (Toxic Substances Control Act):** ACTIVE

· **Hazardous Air Pollutants** Substance is not listed.

· **Proposition 65**

· **Chemicals known to cause cancer:** Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.

· **Chemicals known to cause developmental toxicity:** Substance is not listed.

· **New Jersey Right-to-Know List:** Substance is not listed.

· **New Jersey Special Hazardous Substance List:** Substance is not listed.

· **Pennsylvania Right-to-Know List:** Substance is not listed.

· **Pennsylvania Special Hazardous Substance List:** Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)** Substance is not listed.

· **TLV (Threshold Limit Value)** Substance is not listed.

(Contd. on page 9)

# Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

Trade name: 2-chloroacetamide

(Contd. of page 8)

- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS06 GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
2-chloroacetamide
- **Hazard statements**  
Toxic if swallowed.  
May cause an allergic skin reaction.  
Suspected of damaging fertility or the unborn child.
- **Precautionary statements**  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
If swallowed: Immediately call a poison center/doctor.  
Specific treatment (see on this label).  
Rinse mouth.  
If on skin: Wash with plenty of water.  
If exposed or concerned: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
If skin irritation or rash occurs: Get medical advice/attention.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **SDS created by:** Access GHS, LLC - 888-363-4870 - Team@access-ghs-sds.com
- **Date of previous version** 08/05/2025
- **Date of preparation** 08/08/2025
- **Abbreviations and acronyms:**  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
VOC: Volatile Organic Compounds (USA, EU)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

(Contd. on page 10)



## Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 08/08/2025

Reviewed on 08/05/2025

**Trade name: 2-chloroacetamide**

(Contd. of page 9)

*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*  
*NIOSH: National Institute for Occupational Safety and Health*  
*OSHA: Occupational Safety & Health*  
*TLV: Threshold Limit Value*  
*PEL: Permissible Exposure Limit*  
*REL: Recommended Exposure Limit*  
*Acute toxicity - oral 3: Acute toxicity – Category 3*  
*Sensitization - skin 1: Skin sensitisation – Category 1*  
*Reproductive toxicity 2: Reproductive toxicity – Category 2*  
**\* Data compared to the previous version altered.**