SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifiers**
- **Product name**: 2-Chloro Acetamide
- **CAS-No.**: 79-07-2

1.2 **Relevant identified uses of the substance or mixture and uses advised against**
- **Identified uses**: Laboratory chemicals, Industrial & for professional use only.

1.3 **Details of the supplier of the safety data sheet**
- **Company**: Central Drug House (P) Ltd
  7/28 Vardaan House
  New Delhi-10002
  INDIA
- **Telephone**: +91 11 49404040
- **Email**: care@cdhfinechemical.com

1.4 **Emergency telephone number**
- **Emergency Phone #**: +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
  - Acute toxicity, Oral (Category 3), H301
  - Skin sensitisation (Category 1), H317
  - Reproductive toxicity (Category 2), H361f

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 **Label elements**
- **Labelling according Regulation (EC) No 1272/2008**
- **Pictogram**

  - Signal word: Danger
  - **Hazard statement(s)**
    - H301: Toxic if swallowed.
    - H317: May cause an allergic skin reaction.
    - H361f: Suspected of damaging fertility.
Precautionary statement(s)
P201 Obtain special instructions before use.
P280 Wear protective gloves.
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

Supplemental Hazard
none

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Chloroacetamide</td>
<td>Acute Tox. 3; Skin Sens. 1;</td>
<td>&lt;= 100 %</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>79-07-2</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>201-174-2</td>
<td>Repr. 2; H301, H317, H361f</td>
</tr>
<tr>
<td>Index-No.</td>
<td>616-036-00-0</td>
<td>Concentration limits:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;= 0.1 %: Skin Sens. 1, H317;</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available
SECTION 5: Firefighting measures

5.1 Extinguishing media
   Suitable extinguishing media
   Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
   Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

5.3 Advice for firefighters
   Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
   No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions
   Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
   Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
   For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
   Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
   Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

7.3 Specific end use(s)
   Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls
   Appropriate engineering controls
   Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

   Personal protective equipment

   Eye/face protection
   Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

   Skin protection
   Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
**Body Protection**
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

a) Appearance
   - Form: crystalline
   - Colour: white

b) Odour
   - No data available

c) Odour Threshold
   - No data available

d) pH
   - > 3.5 at 100 g/l at 20 °C

e) Melting point/freezing point
   - Melting point/range: 116 - 118 °C - lit.

f) Initial boiling point and boiling range
   - No data available

g) Flash point
   - 170 °C

h) Evaporation rate
   - No data available

i) Flammability (solid, gas)
   - No data available

j) Upper/lower flammability or explosive limits
   - No data available

k) Vapour pressure
   - 0.05 mmHg at 20 °C

l) Vapour density
   - No data available

m) Relative density
   - No data available

n) Water solubility
   - 52.5 g/l at 20 °C - OECD Test Guideline 105 - completely soluble

o) Partition coefficient: n-octanol/water
   - log Pow: -0.629

p) Auto-ignition temperature
   - No data available

q) Decomposition temperature
   - No data available

r) Viscosity
   - No data available

s) Explosive properties
   - No data available

t) Oxidizing properties
   - No data available

9.2 Other safety information

- Bulk density: 0.73 - 0.85 g/l
- Surface tension: 69.98 mN/m at 20 °C
SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - female - 138 mg/kg(2-Chloroacetamide)
(OECD Test Guideline 401)

Skin corrosion/irritation
No data available(2-Chloroacetamide)

Serious eye damage/eye irritation
No data available(2-Chloroacetamide)

Respiratory or skin sensitisation
Maximisation Test - Guinea pig(2-Chloroacetamide)
Result: May cause sensitisation by skin contact.
(OECD Test Guideline 406)

Germ cell mutagenicity
Hamster(2-Chloroacetamide)
Lungs
Result: negative
OECD Test Guideline 474(2-Chloroacetamide)
Mouse - male and female
Result: negative

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
Suspected human reproductive toxicant(2-Chloroacetamide)

Specific target organ toxicity - single exposure
No data available(2-Chloroacetamide)

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available(2-Chloroacetamide)

Additional Information
Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 10 mg/kg(2-Chloroacetamide)
RTECS: AB5075000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Cough, Shortness of breath, Headache, Nausea, Vomiting(2-Chloroacetamide)

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish LC50 - Carassius auratus (goldfish) - 19.8 mg/l - 96 h(2-Chloroacetamide)
Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 14 mg/l - 48 h(2-Chloroacetamide)

12.2 Persistence and degradability
Biodegradability aerobic - Exposure time 28 d(2-Chloroacetamide)
Result: 94 % - Readily biodegradable (OECD Test Guideline 301B)

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available(2-Chloroacetamide)

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
Harmful to aquatic life.
Do not empty into drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number
ADR/RID: 2811 IMDG: 2811 IATA: 2811

14.2 UN proper shipping name
ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (2-Chloroacetamide)
IMDG: TOXIC SOLID, ORGANIC, N.O.S. (2-Chloroacetamide)
IATA: Toxic solid, organic, n.o.s. (2-Chloroacetamide)

14.3 Transport hazard class(es)
ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group
ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no
14.6 Special precautions for user
No data available

SECTION 15: Regulatory information
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information
Full text of H-Statements referred to under sections 2 and 3.

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

Further information
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.