

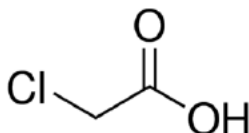
CAS-No.: 79-11-8 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Substance
:
EC Index-No. : 607-003-00-1
EC-No. : 201-178-4
CAS-No. : 79-11-8
Product code : 02729
Chemical structure :



1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial
For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,
Ludhiana Pb. (141007)
+91 9316777775, +91 7707855700
sales@labogens.com - www.Labogens.com

1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), H301
Category 3
Acute toxicity (dermal), H311
Category 3
Acute toxicity (inhal.), H331
Category 3
Skin corrosion/irritation, H314
Category 1B
Hazardous to the aquatic H400
environment — Acute
Hazard, Category 1

CHLOROACETIC ACID For Synthesis

Safety Data Sheet

Full text of H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T; R23/24/25

C; R34

N; R50

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS06

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H314 - Causes severe skin burns and eye damage.
H400 - Very toxic to aquatic life.

Precautionary statements (CLP) :

P261 - Avoid breathing vapours, spray, dust, fume, gas.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER/doctor

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : CHLOROACETIC ACID For Synthesis
CAS-No. : 79-11-8
EC-No. : 201-178-4
EC Index-No. : 607-003-00-1

Full text of R- and H-statements: see section 16

CHLOROACETIC ACID For Synthesis

Safety Data Sheet

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
- First-aid measures after skin contact : Immediately call a POISON CENTER/doctor. Wash with plenty of water/.... Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
- First-aid measures after ingestion : Rinse mouth. Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : Causes severe skin burns and eye damage.
- Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin.
- Symptoms/effects after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Very toxic to aquatic life.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available

CHLOROACETIC ACID For Synthesis

Safety Data Sheet

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid contact with skin and eyes. Do not breathe vapours.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Comply with applicable regulations.
Storage conditions	: Store in a well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection	: Protective gloves
Eye protection	: Chemical goggles or face shield
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: [In case of inadequate ventilation] wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Molecular mass	: 94.5 g/mol
Colour	: White crystalline.
Odour	: penetrating, burning odor.
Odour threshold	: No data available
pH	: < 1 at 800 g/l at 20 °C
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 60 - 63 °C
Freezing point	: No data available
Boiling point	: 189 °C
Flash point	: 126 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available

CHLOROACETIC ACID For Synthesis

Safety Data Sheet

Vapour pressure	: 0.2 hPa at 20 °C
Relative vapour density at 20 °C	: 3.26
Relative density	: No data available
Density	: 1.58 g/cm ³
Solubility	: Water: Very soluble in water
Log Pow	: 0.2
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: ≥ 0.08 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Air contact. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled.
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: < 1 at 800 g/l at 20 °C
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: < 1 at 800 g/l at 20 °C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

CHLOROACETIC ACID For Synthesis

Safety Data Sheet

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Toxic if swallowed. Toxic in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

CHLOROACETIC ACID For Synthesis (79-11-8)

Log Pow	0.2
---------	-----

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1751

UN-No. (IMDG) : 1751

UN-No. (IATA) : 1751

CHLOROACETIC ACID For Synthesis

Safety Data Sheet

UN-No. (ADN) : 1751
UN-No. (RID) : 1751

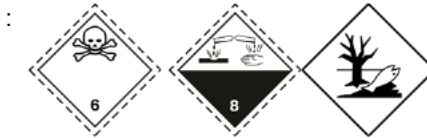
14.2. UN proper shipping name

Proper Shipping Name (ADR) : CHLOROACETIC ACID, SOLID
Proper Shipping Name (IMDG) : CHLOROACETIC ACID, SOLID
Proper Shipping Name (IATA) : Chloroacetic acid, solid
Proper Shipping Name (ADN) : CHLOROACETIC ACID, SOLID
Proper Shipping Name (RID) : CHLOROACETIC ACID, SOLID
Transport document description (ADR) : UN 1751 CHLOROACETIC ACID, SOLID, 6.1 (8), II, (D/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 1751 CHLOROACETIC ACID, SOLID, 6.1 (8), II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 1751 Chloroacetic acid, solid, 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 1751 CHLOROACETIC ACID, SOLID, 6.1 (8), II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 1751 CHLOROACETIC ACID, SOLID, 6.1 (8), II, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 6.1 (8)
Danger labels (ADR) : 6.1, 8



IMDG

Transport hazard class(es) (IMDG) : 6.1 (8)
Danger labels (IMDG) : 6.1, 8



IATA

Transport hazard class(es) (IATA) : 6.1 (8)
Hazard labels (IATA) : 6.1, 8



ADN

Transport hazard class(es) (ADN) : 6.1 (8)
Danger labels (ADN) : 6.1, 8

CHLOROACETIC ACID For Synthesis

Safety Data Sheet



RID

Transport hazard class(es) (RID) : 6.1 (8)

Danger labels (RID) : 6.1, 8



14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : TC2

Limited quantities (ADR) : 500g

Excepted quantities (ADR) : E4

Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T3

Portable tank and bulk container special provisions (ADR) : TP33

Tank code (ADR) : SGAH

Tank special provisions (ADR) : TU15, TE19

Vehicle for tank carriage : AT

Transport category (ADR) : 2

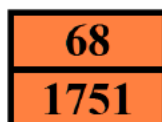
Special provisions for carriage - Packages (ADR) : V11

Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28

Special provisions for carriage - Operation (ADR) : S9, S19

Hazard identification number (Kemler No.) : 68

Orange plates :



CHLOROACETIC ACID For Synthesis

Safety Data Sheet

Tunnel restriction code (ADR) : D/E
EAC code : 2X

- Transport by sea

Packing instructions (IMDG) : P002
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B21, B4
Tank instructions (IMDG) : T3
Tank special provisions (IMDG) : TP33
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : C
Stowage and handling (IMDG) : SW2
Properties and observations (IMDG) : Colourless, very deliquescent crystals. Melting point may be as low as 50°C. In the presence of moisture, corrosive to most metals. Toxic if swallowed, by skin contact or by dust inhalation. Causes burns to skin, eyes and mucous membranes.
MFAG-No : 153

- Air transport

PCA Excepted quantities (IATA) : E4
PCA Limited quantities (IATA) : Y644
PCA limited quantity max net quantity (IATA) : 1kg
PCA packing instructions (IATA) : 668
PCA max net quantity (IATA) : 15kg
CAO packing instructions (IATA) : 675
CAO max net quantity (IATA) : 50kg
ERG code (IATA) : 6C

- Inland waterway transport

Classification code (ADN) : TC2
Special provisions (ADN) : 802
Limited quantities (ADN) : 500 g
Excepted quantities (ADN) : E4
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 2

- Rail transport

Classification code (RID) : TC2
Excepted quantities (RID) : E4
Packing instructions (RID) : P002, IBC08
Special packing provisions (RID) : B4
Mixed packing provisions (RID) : MP10
Portable tank and bulk container instructions (RID) : T3
Portable tank and bulk container special provisions (RID) : TP33
Tank codes for RID tanks (RID) : SGAH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2
Special provisions for carriage – Packages (RID) : W11
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31
Colis express (express parcels) (RID) : CE9
Hazard identification number (RID) : 68

CHLOROACETIC ACID For Synthesis

Safety Data Sheet

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

CHLOROACETIC ACID For Synthesis is not on the REACH Candidate List

CHLOROACETIC ACID For Synthesis is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 3, severe hazard to water (Classification according to AwSV; ID No. 227)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
-----------------------	-------------------------------------

CHLOROACETIC ACID For Synthesis

Safety Data Sheet

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R34	Causes burns
R50	Very toxic to aquatic organisms
C	Corrosive
N	Dangerous for the environment
T	Toxic

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product