

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Chloroacetic acid ≥99,5 %, p.a.

article number: **9849**
Version: **GHS 2.0 en**
Replaces version of: 2021-02-17
Version: (GHS 1)

date of compilation: 2016-06-17
Revision: 2024-03-02

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

1.1 Product identifier

Identification of the substance **Chloroacetic acid ≥99,5 %, p.a.**
Article number 9849
CAS number 79-11-8

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

Relevant identified uses: Laboratory chemical
Laboratory and analytical use
Uses advised against: Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin. Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feedingstuffs.

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0
Telefax: +49 (0) 721 - 56 06 149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

e-mail (competent person): sicherheit@carlroth.de

1.4 Emergency telephone number

| Name | Street | Postal code/city | Telephone | Website |
|--|-----------------|--------------------|-----------|---------|
| NSW Poisons Information Centre Childrens Hospital | Hawkesbury Road | 2145 Westmead, NSW | 131126 | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

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| Section | Hazard class | Cat-egory | Hazard class and category | Hazard statement |
|---------|---|-----------|---------------------------|------------------|
| 3.1O | Acute toxicity (oral) | 3 | Acute Tox. 3 | H301 |
| 3.1D | Acute toxicity (dermal) | 3 | Acute Tox. 3 | H311 |
| 3.1I | Acute toxicity (inhal.) | 4 | Acute Tox. 4 | H332 |
| 3.2 | Skin corrosion/irritation | 1B | Skin Corr. 1B | H314 |
| 3.8R | Specific target organ toxicity - single exposure (respiratory tract irritation) | 3 | STOT SE 3 | H335 |

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

2.2 Label elements

Labelling

Signal word

Danger

Pictograms

GHS05, GHS06



Hazard statements

H301+H311 Toxic if swallowed or in contact with skin
H314 Causes severe skin burns and eye damage
H332 Harmful if inhaled
H335 May cause respiratory irritation

Precautionary statements

Precautionary statements - prevention

P260 Do not breathe dusts or mists
P280 Wear protective gloves/protective clothing

Precautionary statements - response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352 IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Precautionary statements - storage

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

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2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

| | |
|-------------------|-------------------|
| Name of substance | Chloroacetic acid |
| Molecular formula | $C_2H_3ClO_2$ |
| Molar mass | 94.49 g/mol |
| CAS No | 79-11-8 |

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off immediately all contaminated clothing. Self-protection of the first aider.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

After contact with skin, wash immediately with plenty of water. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Following eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

Following ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

4.2 Most important symptoms and effects, both acute and delayed

Corrosion, Unconsciousness, Agitation, Risk of blindness, Gastric perforation, Vomiting, Spasms, Cough, Dyspnoea

4.3 Indication of any immediate medical attention and special treatment needed

none

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SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings!
water, foam, alcohol resistant foam, dry extinguishing powder, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen chloride (HCl)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus. Wear full chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Do not breathe dust.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority. The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains. Take up mechanically.

Advice on how to clean up a spill

Take up mechanically. Control of dust.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation. Use extractor hood (laboratory). Handle and open container with care. Avoid dust formation. Clear contaminated areas thoroughly.

Advice on general occupational hygiene

When using do not eat or drink. Thorough skin-cleansing after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Store locked up.

Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

| Country | Name of agent | CAS No | Identifier | TWA [mg/m ³] | STEL [mg/m ³] | Ceiling-C [mg/m ³] | Notation | Source |
|---------|-----------------------|---------|------------|--------------------------|---------------------------|--------------------------------|----------|--------|
| AU | monochloroacetic acid | 79-11-8 | WES | 1.2 | | | H | WES |

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

H Absorbed through the skin

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Human health values

| Relevant DNELs and other threshold levels | | | | |
|---|---------------------|------------------------------------|-------------------|----------------------------|
| Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
| DNEL | 8 mg/m ³ | human, inhalatory | worker (industry) | acute - systemic effects |
| DNEL | 0.07 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |

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| Relevant DNELs and other threshold levels | | | | |
|---|-----------------------|------------------------------------|-------------------|----------------------------|
| Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
| DNEL | 4 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| DNEL | 2 mg/m ³ | human, inhalatory | worker (industry) | chronic - local effects |
| DNEL | 5.7 mg/m ³ | human, inhalatory | worker (industry) | acute - local effects |

Environmental values

| Relevant PNECs and other threshold levels | | | | |
|---|-----------------|-----------------------|------------------------------|------------------------------|
| End-point | Threshold level | Organism | Environmental compartment | Exposure time |
| PNEC | 0.66 µg/l | aquatic organisms | water | intermittent release |
| PNEC | 0.7 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| PNEC | 0.07 µg/l | aquatic organisms | marine water | short-term (single instance) |
| PNEC | 1.6 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| PNEC | 2.57 µg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| PNEC | 0.257 µg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| PNEC | 0.006 mg/kg | terrestrial organisms | soil | short-term (single instance) |

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection. Wear face protection.

Skin protection



• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

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- **type of material**

NBR (Nitrile rubber)

- **material thickness**

>0,11 mm

- **breakthrough times of the glove material**

>480 minutes (permeation: level 6)

- **other protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P3 (filters at least 99,95 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | solid |
| Form | crystalline |
| Colour | white |
| Odour | stinging |
| Melting point/freezing point | 63 °C at 1,013 hPa (ECHA) |
| Boiling point or initial boiling point and boiling range | 190 °C at 1,013 hPa (ECHA) |
| Flammability | this material is combustible, but will not ignite readily |
| Lower and upper explosion limit | not determined |
| Flash point | 126 °C |
| Auto-ignition temperature | not determined |
| Decomposition temperature | not relevant |
| pH (value) | <1 (in aqueous solution: 800 g/l, 20 °C) |
| Kinematic viscosity | not relevant |
| <u>Solubility(ies)</u> | |
| Water solubility | >1,000 g/l at 20 °C (ECHA) |
| <u>Partition coefficient</u> | |

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| | |
|--|--|
| Partition coefficient n-octanol/water (log value): | 0.49 (ECHA) |
| Vapour pressure | 2.14 Pa at 20 °C |
| <u>Density and/or relative density</u> | |
| Density | 1.64 g/cm ³ at 20 °C (ECHA) |
| Relative vapour density | 3.26 at 20 °C (air = 1) |
| Particle characteristics | No data available. |

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not relevant

Other safety characteristics:

Surface tension 73.1 mN/m (20 °C) (ECHA)

SECTION 10: Stability and reactivity

10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Release of an acute toxic gas: Metals,
Exothermic reaction with: Reducing agents, strong oxidiser, Amines, Alkalis,
Danger of explosion: Hydrogen peroxide

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Toxic if swallowed. Toxic in contact with skin. Harmful if inhaled.

| Acute toxicity | | | | | |
|---------------------------|----------|------------------------------|---------|--------|--------|
| Exposure route | Endpoint | Value | Species | Method | Source |
| oral | LD50 | 90.4 mg/kg | rat | | ECHA |
| inhalation: dust/ mist | LC50 | >1,268 mg/m ³ /4h | rat | | ECHA |
| dermal | LD50 | 305 mg/kg | rat | | ECHA |

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects)

• If in eyes

causes burns, Causes serious eye damage, risk of blindness

• If inhaled

Dyspnoea, Irritation to respiratory tract, cough

• If on skin

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causes severe burns, causes poorly healing wounds

• **Other information**

Cardiac arrhythmias, Spasms, Unconsciousness

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life.

| Aquatic toxicity (acute) | | | | |
|--------------------------|------------|-----------------------|--------|---------------|
| Endpoint | Value | Species | Source | Exposure time |
| LC50 | 369 mg/l | fish | ECHA | 96 h |
| EC50 | 74.2 mg/l | aquatic invertebrates | ECHA | 48 h |
| ErC50 | 0.033 mg/l | algae | ECHA | 72 h |

| Aquatic toxicity (chronic) | | | | |
|----------------------------|---------|---------|--------|---------------|
| Endpoint | Value | Species | Source | Exposure time |
| LC50 | 57 mg/l | fish | ECHA | 35 d |

12.2 Persistence and degradability

Theoretical Oxygen Demand: 0.5079 mg/mg
Theoretical Carbon Dioxide: 0.9315 mg/mg

Biodegradation

The substance is readily biodegradable.

| Process of degradability | | |
|--------------------------|------------------|------|
| Process | Degradation rate | Time |
| DOC removal | >95 % | 10 d |
| oxygen depletion | 69 % | 28 d |

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

| | |
|---------------------------|-------------|
| n-octanol/water (log KOW) | 0.49 (ECHA) |
|---------------------------|-------------|

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

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12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

Relevant provisions relating to waste(Basel Convention)

Properties of waste which render it hazardous

H6.1 Poisonous (Acute)
H11 Toxic (Delayed or chronic)

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number

| | |
|----------------|---------|
| UN RTDG | UN 1751 |
| IMDG-Code | UN 1751 |
| ICAO-TI | UN 1751 |

14.2 UN proper shipping name

| | |
|----------------|--------------------------|
| UN RTDG | CHLOROACETIC ACID, SOLID |
| IMDG-Code | CHLOROACETIC ACID, SOLID |
| ICAO-TI | Chloroacetic acid, solid |

14.3 Transport hazard class(es)

| | |
|----------------|------------|
| UN RTDG | 6.1 (8) |
| IMDG-Code | 6.1 (8) |
| ICAO-TI | 6.1 (8) |

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14.4 Packing group

| | |
|----------------|----|
| UN RTDG | II |
| IMDG-Code | II |
| ICAO-TI | II |

14.5 Environmental hazards

hazardous to the aquatic environment

14.6 Special precautions for user


There is no additional information.

14.7 Transport in bulk according to IMO instruments


The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Transport information National regulations Additional information (UN RTDG)

| | |
|---|---|
| UN number | 1751 |
| Class | 6.1 |
| Subsidiary risk(s) | 8 |
| Environmental hazards | Yes Hazardous to the aquatic environment |
| Packing group | II |
| Danger label(s) | 6.1+8 Fish and tree |
|  | |
| Special provisions (SP) | - UN RTDG |
| Excepted quantities (EQ) | E4 UN RTDG |
| Limited quantities (LQ) | 500 g UN RTDG |
| Emergency Action Code | 2X |

International Maritime Dangerous Goods Code (IMDG) - Additional information

| | |
|---|---|
| Proper shipping name | CHLOROACETIC ACID, SOLID |
| Particulars in the shipper's declaration | UN1751, CHLOROACETIC ACID, SOLID, 6.1 (8), II, MARINE POLLUTANT |
| Marine pollutant | yes (hazardous to the aquatic environment) |
| Danger label(s) | 6.1+8, "Fish and tree" |
|  | |
| Excepted quantities (EQ) | E4 |
| Limited quantities (LQ) | 500 g |
| EmS | F-A, S-B |

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| | |
|---|---|
| Stowage category | C |
| Segregation group | 1 - Acids |
| International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information | |
| Proper shipping name | Chloroacetic acid, solid |
| Particulars in the shipper's declaration | UN1751, Chloroacetic acid, solid, 6.1 (8), II |
| Environmental hazards | yes (hazardous to the aquatic environment) |
| Danger label(s) | 6.1+8 |
| | |
| Exempted quantities (EQ) | E4 |
| Limited quantities (LQ) | 1 kg |

SECTION 15: Regulatory information

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

There is no additional information.

National regulations(Australia)

Australian Inventory of Chemical Substances(AICS)

Substance is listed.

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

| Country | Inventory | Status |
|---------|------------|------------------------------|
| AU | AIIC | substance is listed |
| CA | DSL | substance is listed |
| CN | IECSC | substance is listed |
| EU | ECSI | substance is listed |
| EU | REACH Reg. | substance is listed |
| JP | CSCL-ENCS | substance is listed |
| KR | KECI | substance is listed |
| MX | INSQ | substance is listed |
| NZ | NZIoC | substance is listed |
| PH | PICCS | substance is listed |
| TR | CICR | substance is listed |
| TW | TCSI | substance is listed |
| US | TSCA | substance is listed (ACTIVE) |
| VN | NCI | substance is listed |

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Legend

| | |
|------------|---|
| AIIC | Australian Inventory of Industrial Chemicals |
| CICR | Chemical Inventory and Control Regulation |
| CSCL-ENCS | List of Existing and New Chemical Substances (CSCL-ENCS) |
| DSL | Domestic Substances List (DSL) |
| ECSI | EC Substance Inventory (EINECS, ELINCS, NLP) |
| IECSC | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ | National Inventory of Chemical Substances |
| KECI | Korea Existing Chemicals Inventory |
| NCI | National Chemical Inventory |
| NZIoC | New Zealand Inventory of Chemicals |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances (PICCS) |
| REACH Reg. | REACH registered substances |
| TCSI | Taiwan Chemical Substance Inventory |
| TSCA | Toxic Substance Control Act |

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|---|--|-----------------|
| 1.1 | Index No: 607-003-00-1 | | yes |
| 1.1 | EC number: 201-178-4 | CAS number: 79-11-8 | yes |
| 2.1 | | Classification acc. to GHS: change in the listing (table) | yes |
| 2.1 | Remarks: For full text of Hazard- and EU Hazard-statements: see SECTION 16. | | yes |
| 2.1 | | The most important adverse physicochemical, human health and environmental effects: Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis. | yes |
| 2.2 | | Pictograms: change in the listing (table) | yes |
| 2.2 | | Hazard statements: change in the listing (table) | yes |
| 2.2 | | Precautionary statements - prevention: change in the listing (table) | yes |
| 2.2 | | Precautionary statements - response: change in the listing (table) | yes |
| 2.2 | Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger | | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |

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| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|---|---|-----------------|
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.3 | Other hazards: There is no additional information. | Other hazards | yes |
| 2.3 | | Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB. | yes |
| 2.3 | | Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%. | yes |
| 3.1 | Index No: 607-003-00-1 | | yes |
| 3.1 | EC number: 201-178-4 | | yes |
| 3.1 | CAS number: 79-11-8 | | yes |
| 11.1 | | Acute toxicity: change in the listing (table) | yes |
| 12.1 | | Aquatic toxicity (chronic): change in the listing (table) | yes |
| 14.1 | UN number: 1751 | UN number | yes |
| 14.1 | | UN RTDG: UN 1751 | yes |
| 14.1 | | IMDG-Code: UN 1751 | yes |
| 14.1 | | ICAO-TI: UN 1751 | yes |
| 14.2 | UN proper shipping name: CHLOROACETIC ACID, SOLID | UN proper shipping name | yes |
| 14.2 | Hazardous ingredients: Chloroacetic acid | | yes |
| 14.2 | | UN RTDG: CHLOROACETIC ACID, SOLID | yes |
| 14.2 | | IMDG-Code: CHLOROACETIC ACID, SOLID | yes |
| 14.2 | | ICAO-TI: Chloroacetic acid, solid | yes |
| 14.3 | Class: 6.1 (toxic substances) | | yes |
| 14.3 | | UN RTDG: 6.1 (8) | yes |
| 14.3 | | IMDG-Code: 6.1 (8) | yes |
| 14.3 | | ICAO-TI: 6.1 (8) | yes |

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| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|---|--|-----------------|
| 14.4 | Packing group: II (substance presenting medium danger) | Packing group | yes |
| 14.4 | | UN RTDG: II | yes |
| 14.4 | | IMDG-Code: II | yes |
| 14.4 | | ICAO-TI: II | yes |
| 14.6 | Special precautions for user: Provisions for dangerous goods (ADR) should be complied within the premises. | Special precautions for user: There is no additional information. | yes |
| 14.8 | • Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) | | yes |
| 14.8 | UN number: 1751 | | yes |
| 14.8 | Proper shipping name: CHLOROACETIC ACID, SOLID | | yes |
| 14.8 | Particulars in the transport document: UN1751, CHLOROACETIC ACID, SOLID, 6.1 (8), II, (D/E), environmentally hazardous | | yes |
| 14.8 | Class: 6.1 | | yes |
| 14.8 | Classification code: TC2 | | yes |
| 14.8 | Packing group: II | | yes |
| 14.8 | Danger label(s): 6.1+8 + "fish and tree" | | yes |
| 14.8 | | Danger label(s): change in the listing (table) | yes |
| 14.8 | Environmental hazards: yes (hazardous to the aquatic environment) | | yes |
| 14.8 | Special provisions (SP): 802(ADN) | | yes |
| 14.8 | Excepted quantities (EQ): E4 | | yes |
| 14.8 | Limited quantities (LQ): 500 g | | yes |
| 14.8 | Transport category (TC): 2 | | yes |
| 14.8 | Tunnel restriction code (TRC): D/E | | yes |
| 14.8 | Hazard identification No: 68 | | yes |
| 14.8 | Emergency Action Code: 2X | | yes |

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Chloroacetic acid ≥99,5 %, p.a.

article number: 9849

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|--|--|-----------------|
| 14.8 | UN number: 1751 | | yes |
| 14.8 | Class: 6.1 | | yes |
| 14.8 | Subsidiary risk(s): 8 | | yes |
| 14.8 | Packing group: II | | yes |
| 14.8 | Special provisions (SP): - | | yes |
| 14.8 | Acute toxicity: oralLD5090 mg/kg rat ECHA dermalLD50305 mg/kg rat ECHA | Transport information National regulations Additional information (UN RTDG) | yes |
| 14.8 | Aquatic toxicity (chronic): LC5057 mg/l fish ECHA 35 d NOEC32 mg/l aquatic invertebrates ECHA 21 d | UN number: 1751 | yes |
| 14.8 | | Class: 6.1 | yes |
| 14.8 | | Subsidiary risk(s): 8 | yes |
| 14.8 | • Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS): Not listed. | Environmental hazards: Yes Hazardous to the aquatic environment | yes |
| 14.8 | • Regulation 850/2004/EC on persistent organic pollutants (POP): Not listed. | Packing group: II | yes |
| 14.8 | • Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC): Not listed. | Danger label(s): 6.1+8 Fish and tree | yes |
| 14.8 | | Danger label(s): change in the listing (table) | yes |
| 14.8 | | Special provisions (SP): - UN RTDG | yes |
| 14.8 | | Excepted quantities (EQ): E4 UN RTDG | yes |
| 14.8 | | Limited quantities (LQ): 500 g UN RTDG | yes |
| 14.8 | | Emergency Action Code: 2X | yes |
| 14.8 | | International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information | yes |
| 14.8 | | Proper shipping name: Chloroacetic acid, solid | yes |
| 14.8 | | Particulars in the shipper's declaration: UN1751, Chloroacetic acid, solid, 6.1 (8), II | yes |

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Chloroacetic acid ≥99,5 %, p.a.

article number: **9849**

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|--|--|-----------------|
| 14.8 | | Environmental hazards: yes (hazardous to the aquatic environment) | yes |
| 14.8 | | Danger label(s): 6.1+8 | yes |
| 14.8 | | Danger label(s): change in the listing (table) | yes |
| 14.8 | | Excepted quantities (EQ): E4 | yes |
| 14.8 | | Limited quantities (LQ): 1 kg | yes |
| 15.1 | Safety, health and environmental regulations/ legislation specific for the substance or mixture | Safety, health and environmental regulations/ legislation specific for the substance or mixture: There is no additional information. | yes |
| 15.1 | Relevant provisions of the European Union (EU) | | yes |
| 15.1 | • Restrictions according to REACH, Annex XVII: not listed | | yes |
| 15.1 | • List of substances subject to authorisation (REACH, Annex XIV): not listed | | yes |
| 15.1 | • Seveso Directive | | yes |
| 15.1 | | 2012/18/EU (Seveso III): change in the listing (table) | yes |
| 15.1 | • Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle re- finishing products (2004/42/EC, Deco-Paint Dir- ective) | | yes |
| 15.1 | VOC content: 100 % | | yes |
| 15.1 | • Directive on industrial emissions (VOCs, 2010/ 75/EU) | | yes |
| 15.1 | VOC content: 100 % | | yes |
| 15.1 | Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electri- cal and electronic equipment (RoHS) - Annex II: not listed | | yes |
| 15.1 | Regulation 166/2006/EC concerning the estab- lishment of a European Pollutant Release and Transfer Register (PRTR): not listed | | yes |
| 15.1 | Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD): not listed | | yes |
| 15.1 | National inventories: Substance is listed in the following national in- ventories: - EINECS/ELINCS/NLP (Europe) - REACH (Europe) | | yes |

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article number: **9849**

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|---------------------------|--|-----------------|
| 15.1 | | National regulations(Australia) | yes |
| 15.1 | | Australian Inventory of Chemical Substances(AICS): Substance is listed. | yes |
| 15.1 | | Other information: Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. | yes |
| 15.1 | | National inventories | yes |
| 15.1 | | National inventories: change in the listing (table) | yes |

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|-----------|--|
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| Ceiling-C | Ceiling value |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| ED | Endocrine disruptor |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EmS | Emergency Schedule |
| ErC50 | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | Technical instructions for the safe transport of dangerous goods by air |
| IMDG | International Maritime Dangerous Goods Code |
| IMDG-Code | International Maritime Dangerous Goods Code |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval |
| LD50 | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |

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| Abbr. | Descriptions of used abbreviations |
|---------|---|
| PNEC | Predicted No-Effect Concentration |
| STEL | Short-term exposure limit |
| TWA | Time-weighted average |
| UN RTDG | UN Recommendations on the Transport of Dangerous Good |
| vPvB | Very Persistent and very Bioaccumulative |
| WES | Safe Work Australia: Workplace exposure standards for airborne contaminants |

Key literature references and sources for data

Safe Work Australia's Code of Practice for Labelling of Workplace Hazardous Chemicals (under WHS Regulations).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text |
|------|--|
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.