acc. to Regulation (EC) No. 1907/2006 (REACH)



Chloroacetic acid ≥99,5 %, p.a.

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

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

1.1 Product identifier

Identification of the substance	<b>Chloroacetic acid</b> ≥99,5 %, p.a.
Article number	9849
Index No (GB CLP)	607-003-00-1
EC number	201-178-4
CAS number	79-11-8

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

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 Department Health, Safety and Environment sheet:

e-mail (competent person):

#### sicherheit@carlroth.de

#### 1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

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## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.10	Acute toxicity (oral)	3	Acute Tox. 3	H301
3.1D	Acute toxicity (dermal)	3	Acute Tox. 3	H311
3.1I	Acute toxicity (inhal.)	3	Acute Tox. 3	H331
3.2	Skin corrosion/irritation	1B	Skin Corr. 1B	H314
3.8R	Specific target organ toxicity - single exposure (respirat- ory tract irritation)	3	STOT SE 3	H335
4.1A	Hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400

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. Spillage and fire water can cause pollution of watercourses.

#### 2.2 Label elements

#### Labelling

Signal word Danger

#### **Pictograms**



#### **Hazard statements**

H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

#### **Precautionary statements**

#### **Precautionary statements - prevention**

P261	Avoid breathing dust
P280	Wear protective gloves/eye protection

#### **Precautionary statements - response**

P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin
	with water [or shower]
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do. Continue rinsing

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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  $\ge 0,1\%$ .

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Name of substance	Chloroacetic acid
Molecular formula	C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>
Molar mass	94,49 <sup>g</sup> / <sub>mol</sub>
CAS No	79-11-8
EC No	201-178-4
Index No (GB CLP)	607-003-00-1

### Substance, Specific Conc. Limits, M-factors, ATE

Specific Conc. Limits	M-Factors	ATE	Exposure route
STOT SE 3; H335: C ≥ 5 %	M-factor (acute) = 10	90,4 <sup>mg</sup> / <sub>kg</sub> 305 <sup>mg</sup> / <sub>kg</sub> >0,5 <sup>mg</sup> / <sub>l</sub> /4h	oral dermal inhalation: dust/ mist

## **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**

Call a physician immediately. If breathing is irregular or stopped, administer artificial respiration.

#### 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).



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#### 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

## **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 (CO<sub>2</sub>), Hydrogen chloride (HCl)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. 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.



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#### 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.

## 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.

#### Measures to protect the environment

Avoid release to the environment.

#### 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)**

Coun try	Name of agent	CAS No	Identifi- er	TWA [mg/ m³]	STEL [mg/ m³]	Ceil- ing-C [mg/ m <sup>3</sup> ]	Nota- tion	Source
GB	monochloroacetic acid	79-11-8	WEL	1,2				EH40/2005

Notation

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

Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-STEL

minute period (unless otherwise specified) 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) TWA



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uman health values				
Relevant DNELs and other threshold levels				
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	8 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
DNEL	0,07 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects
DNEL	4 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	2 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
DNEL	5,7 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects

#### **Environmental values**

Relevant	Relevant PNECs and other threshold levels					
End- point	Threshold level	Organism	Environmental com- partment	Exposure time		
PNEC	0,66 <sup>µg</sup> / <sub>l</sub>	aquatic organisms	water	intermittent release		
PNEC	0,7 <sup>µg</sup> / <sub>l</sub>	aquatic organisms	freshwater	short-term (single instance)		
PNEC	0,07 <sup>µg</sup> / <sub>l</sub>	aquatic organisms	marine water	short-term (single instance)		
PNEC	1,6 <sup>mg</sup> / <sub>l</sub>	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)		
PNEC	2,57 <sup>µg</sup> / <sub>kg</sub>	aquatic organisms	freshwater sediment	short-term (single instance)		
PNEC	0,257 <sup>µg</sup> / <sub>kg</sub>	aquatic organisms	marine sediment	short-term (single instance)		
PNEC	0,006 <sup>mg</sup> / <sub>kg</sub>	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**



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#### 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.

#### • 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

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articl	e number: <b>9849</b>	
	pH (value)	<1 (in aqueous solution: 800 <sup>g</sup> / <sub>l</sub> , 20 °C)
	Kinematic viscosity	not relevant
	Solubility(ies)	
	Water solubility	>1.000 <sup>g</sup> / <sub>l</sub> at 20 °C (ECHA)
	Partition coefficient	
	Partition coefficient n-octanol/water (log value):	0,49 (ECHA)
	Vapour pressure	2,14 Pa at 20 °C
		_,
	Density and/or relative density	
	Density	1,64 <sup>g</sup> / <sub>cm³</sub> 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 <sup>mN</sup> / <sub>m</sub> (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.

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#### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Classification acc. to GHS**

#### Acute toxicity

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

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	90,4 <sup>mg</sup> / <sub>kg</sub>	rat		ECHA
inhalation: dust/ mist	LC50	>1.268 <sup>mg</sup> / <sub>m³</sub> /4h	rat		ECHA
dermal	LD50	305 <sup>mg</sup> / <sub>kg</sub>	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

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#### • If inhaled

Dyspnoea, Irritation to respiratory tract, cough

#### • If on skin

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  $\ge 0,1\%$ .

#### 11.3 Information on other hazards

There is no additional information.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

Very toxic to aquatic life.

Aquatic toxicity (acute)				
Endpoint	Value	Species	Source	Exposure time
LC50	369 <sup>mg</sup> / <sub>l</sub>	fish	ECHA	96 h
EC50	74,2 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	ECHA	48 h
ErC50	0,033 <sup>mg</sup> / <sub>l</sub>	algae	ECHA	72 h

#### Aquatic toxicity (chronic)

Endpoint	Value	Species	Source	Exposure time
LC50	57 <sup>mg</sup> / <sub>l</sub>	fish	ECHA	35 d

#### 12.2 Persistence and degradability

Theoretical Oxygen Demand: 0,5079 <sup>mg</sup>/<sub>mg</sub> Theoretical Carbon Dioxide: 0,9315 <sup>mg</sup>/<sub>mg</sub>

#### 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)

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#### 12.4 Mobility in soil

Data are not available.

- **12.5 Results of PBT and vPvB assessment** Data are not available.
- **12.6** Endocrine disrupting properties Does not contain an endocrine disruptor (ED) at a concentration of  $\ge 0,1\%$ .

#### 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. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

#### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### Properties of waste which render it hazardous

- **HP 5** specific target organ toxicity (STOT)/aspiration toxicity
- **HP 6** acute toxicity
- HP8 corrosive
- HP 14 ecotoxic

#### 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 or ID number

ADRRID	UN 1751
IMDG-Code	UN 1751
ICAO-TI	UN 1751
UN proper shipping name	
ADRRID	CHLOROACETIC ACID, SOLID
IMDG-Code	CHLOROACETIC ACID, SOLID

14.2

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	ICAO-TI	Chloroacetic acid, solid
14.3	Transport hazard class(es)	
	ADRRID	6.1 (8)
	IMDG-Code	6.1 (8)
	ICAO-TI	6.1 (8)
14.4	Packing group	
	ADRRID	II
	IMDG-Code	II
	ICAO-TI	II
14.5	Environmental hazards	hazardous to the aquatic environment

#### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

#### 14.7 Maritime 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

# Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

CHLOROACETIC ACID, SOLID
UN1751, CHLOROACETIC ACID, SOLID, 6.1 (8), II, (D/E), environmentally hazardous
TC2
6.1+8, "Fish and tree"
<b>Yes</b> (hazardous to the aquatic environment)
802(ADN)
E4
500 g
2
D/E
68
2X
age of Dangerous Goods by Rail (RID)Additional
TC2
6.1+8, "Fish and tree"



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Environmental hazards	Yes Hazardous to water
Special provisions (SP)	802(ADN)
Excepted quantities (EQ)	E4
Limited quantities (LQ)	500 g
Transport category (TC)	2
Hazard identification No	68
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), MARINE POLLUTANT
Marine pollutant	<b>yes</b> (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
Stowage category	C
Segregation group	1 - Acids
International Civil Aviation Organization (l	CAO-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	<b>yes</b> (hazardous to the aquatic environment)
Danger label(s)	6.1+8
Excepted 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 Relevant provisions of the European Union (EU)

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Seveso Directive					
2012/18/EU (Seveso III)					
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements		Notes	
H2	acute toxic (cat. 2 + cat. 3, inhal.)	50	200	41)	

Notation

- Category 2, all exposure routes - category 3, inhalation exposure route 41)

#### **Deco-Paint Directive**

VOC content	100 %
VOC content	1.640 <sup>g</sup> / <sub>l</sub>

#### **Industrial Emissions Directive (IED)**

VOC content	0 %
VOC content	0 g/l

#### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

#### Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

#### Water Framework Directive (WFD)

l ist of	pollutants	(WFD)
LISCOL	ponutants	

Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Chloroacetic acid	Organohalogen compounds and substances which may form such compounds in the aquatic envir- onment		a)	

Legend

Indicative list of the main pollutants a)

#### Regulation on the marketing and use of explosives precursors

not listed

#### **Regulation on drug precursors**

not listed

#### **Regulation on substances that deplete the ozone layer (ODS)**

not listed

#### Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

## **Regulation on persistent organic pollutants (POP)**

not listed

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#### National regulations(GB)

# List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list not listed

#### **Restrictions according to GB REACH, Annex 17**

not 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

#### 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 (FINECS, 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 Inventory of Chemicals PICCS Philippine 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.

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## **SECTION 16: Other information**

#### Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety relev ant
1.1	Index No: 607-003-00-1		yes
1.1		EC number: 201-178-4	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-state- ments: see SECTION 16.		yes
2.1		The most important adverse physicochemical, human health and environmental effects: Skin corrosion produces an irreversible dam- age to the skin; namely, visible necrosis through the epidermis and into the dermis. Spillage and fire water can cause pollution of watercourses.	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
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

# Safety data sheet Safety data sheet acc. to Regulation (EC) No. 1907/2006 (REACH)

### Chloroacetic acid ≥99,5 %, p.a.

### article number: 9849



Section	Former entry (text/value)	Actual entry (text/value)	Safety relev- ant
3.1	EC number: 201-178-4		yes
3.1	CAS number: 79-11-8		yes
9.2	Temperature class (EU, acc. to ATEX): T1 (Maximum permissible surface temperature on the equipment: 450°C)		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 or ID number	yes
14.1		ADRRID: 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		ADRRID: 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		ADRRID: 6.1 (8)	yes
14.3		IMDG-Code: 6.1 (8)	yes
14.3		ICAO-TI: 6.1 (8)	yes
14.4	Packing group: II (substance presenting medium danger)	Packing group	yes
14.4		ADRRID: II	yes
14.4		IMDG-Code: II	yes
14.4		ICAO-TI: II	yes
14.8	UN number: 1751		yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety relev- ant
14.8	Class: 6.1		yes
14.8	Packing group: II		yes
14.8	Emergency Action Code: 2X		yes
14.8		Emergency Action Code: 2X	yes
14.8		Regulations concerning the International Car- riage of Dangerous Goods by Rail (RID)Addition- al information	yes
14.8		Classification code: TC2	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 water	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		Hazard identification No: 68	yes
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		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.

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
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	• Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC): Not listed.		yes
15.1	• Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS): Not listed.		yes
15.1	• Regulation 850/2004/EC on persistent organic pollutants (POP): Not listed.		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	VOC content: 100 %		yes
15.1		VOC content: 100 %	yes
15.1		VOC content: 1.640 <sup>g</sup> / <sub>l</sub>	yes
15.1	VOC content: 100 %		yes
15.1		VOC content: 0 %	yes
15.1		VOC content: 0 <sup>g</sup> / <sub>l</sub>	yes
15.1	Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD): not listed	Water Framework Directive (WFD)	yes
15.1	National inventories: Substance is listed in the following national in- ventories: - EINECS/ELINCS/NLP (Europe) - REACH (Europe)		yes
15.1		List of pollutants (WFD): change in the listing (table)	yes
15.1		Regulation on the marketing and use of explos- ives precursors: not listed	yes

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#### Chloroacetic acid ≥99,5 %, p.a.

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
15.1		Regulation on drug precursors: not listed	yes
15.1		Regulation on substances that deplete the ozone layer (ODS): not listed	yes
15.1		Regulation concerning the export and import of hazardous chemicals (PIC): not listed	yes
15.1		Regulation on persistent organic pollutants (POP): not listed	yes
15.1		National regulations(GB)	yes
15.1		List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: not listed	yes
15.1		Restrictions according to GB REACH, Annex 17: not listed	yes
15.1		Other information: Directive 94/33/EC on the protection of young people at work. Observe employment restric- tions 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
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
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
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule

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Abbr.	Descriptions of used abbreviations	
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	
GB CLP	The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)	
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions	
ΙΑΤΑ	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	
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008	
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	
M-factor	Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present	
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)	
STEL	Short-term exposure limit	
TWA	Time-weighted average	
VOC	Volatile Organic Compounds	
vPvB	Very Persistent and very Bioaccumulative	
WEL	Workplace exposure limit	

#### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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#### 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.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.

#### Disclaimer

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