

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 07/14/2015

Reviewed on 07/14/2015

### \* 1 Identification

- **Product identifier**
- **Trade name:** ChlorAC
- **Product number:** 1700-0132, 1700-0025
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Product description** ChlorAC Buffer according to USA EPA Method 531.1 for preservation of water samples
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Pickering Laboratories, Inc.  
1280 Space Park Way  
Mountain View, CA 94043  
Phone: (650) 694-6700  
Fax: (650) 968-0749  
www.pickeringlabs.com  
support@pickeringlabs.com
- **Emergency telephone number:**  
Clean Harbors Environmental Services  
1-800-645-8265

### \* 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Chloroacetic acid
- **Hazard statements**  
Causes serious eye damage.
- **Precautionary statements**  
Wear eye protection / face protection.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Immediately call a poison center/doctor.

(Contd. on page 2)

## Safety Data Sheet (SDS)

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



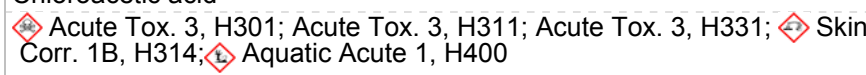
- **Hazard(s) not otherwise classified (HNOC):** None known

### \* 3 Composition/information on ingredients

7732-18-5	Water, distilled water, deionized water	73-76%
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- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous Components:**

CAS: 79-11-8	Chloroacetic acid	13.5-14.5%
RTECS: AF 8575000		
CAS: 127-08-2	Potassium Acetate	9.5-10.1%

### \* 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
Seek medical treatment.
- **After eye contact:**  
Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- **After swallowing:**  
Rinse mouth with water ensuring that rinse is not swallowed. Drink 2 glasses of water to dilute and induce vomiting by touching finger to the back of the victims throat. Get medical assistance immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### \* 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**  
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

(Contd. on page 3)

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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### \* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Use neutralizing agent.  
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### \* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Avoid contact with skin, eyes and clothing  
Avoid breathing fumes.  
Use personal protection equipment as outlined in section 8.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in dry conditions at a temperature range of 8°C - 25°C.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

### \* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**

· **Components with occupational exposure limits:**

**79-11-8 Chloroacetic acid**

TLV	Long-term value: 2* mg/m <sup>3</sup> , 0.5* ppm Skin;*as inhalable fraction and vapor
WEEL	Long-term value: 0.5 ppm Skin

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Use adequate exhaust ventilation to prevent inhalation of product vapors.  
Do not eat or drink while handling product.

(Contd. on page 4)

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 07/14/2015

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Avoid contact with the eyes and skin.  
 Wash hands before breaks and at the end of work.  
 Immediately remove all soiled and contaminated clothing and wash before reuse.

· **Breathing equipment:**

Respiratory protection is not required unless handling of the material produces nuisance airborne concentrations.

· **Protection of hands:**



Protective gloves

· **Material of gloves** Rubber, latex or vinyl.

· **Penetration time of glove material**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Lab coat

\* **9 Physical and chemical properties**

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined.

· **pH-value @ 20 °C (68 °F):** 3

· **Change in condition**

<b>Melting point/Melting range:</b>	Not determined.
<b>Boiling point/Boiling range:</b>	100 °C (212 °F) Not determined.

· **Flash point:** 126 °C (259 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 470 °C (878 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· **Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)

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OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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- **Density @ 20 °C (68 °F):** 1.044 g/cm<sup>3</sup> (8.712 lbs/gal)
- **Relative density** Not determined.
- **Vapor density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Other information** No further relevant information available.

\* **10 Stability and reactivity**

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Primary and secondary amines will cause non-hazardous contamination of this solution.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

\* **11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**

· <b>LD/LC50 values that are relevant for classification:</b>		
<b>79-11-8 Chloroacetic acid</b>		
Oral	LD50	580 mg/kg (rat)
Dermal	LD50	305 mg/kg (rat)
Inhalative	LC50/4 h	0.18 mg/l (rat)

- **Primary irritant effect:**
  - on the skin:** Mild irritant effect.
  - on the eye:** Mild irritant effect.
- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**  
Substance is not listed.

None of the ingredients are listed.

- **NTP (National Toxicology Program)**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

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OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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### \* 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### \* 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
This product may be mixed with a combustible solvent and burned in a chemical incinerator equipped with an afterburner and scrubber. This product can also be sent to an EPA approved waste disposal facility. Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### \* 14 Transport information

- **UN-Number**
  - **DOT, ADR, IMDG, IATA** UN2922
  - **UN proper shipping name**
  - **DOT** Corrosive liquids, toxic, n.o.s. (Chloroacetic acid, solid)
  - **ADR** UN2922 Corrosive liquids, toxic, n.o.s. (Chloroacetic acid, solid)
  - **IMDG, IATA** CORROSIVE LIQUID, TOXIC, N.O.S. (CHLOROACETIC ACID, SOLID)
  - **Transport hazard class(es)**
  - **DOT**
- 

- **Class** 8 Corrosive substances
  - **Label** 8+6.1

(Contd. on page 7)

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OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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· **ADR**



- **Class** 8 (CT1) Corrosive substances
- **Label** 8+6.1

· **IMDG, IATA**



- **Class** 8 Corrosive substances
- **Label** 8+6.1
- **Packing group** III
- **DOT, ADR, IMDG, IATA** III
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Warning: Corrosive substances
- **Danger code (Kemler):** 86
- **EMS Number:** F-A,S-B
- **Segregation groups** Acids
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** UN2922, Corrosive liquids, toxic, n.o.s. (Chloroacetic acid, solid), 8 (6.1), III

**\* 15 Regulatory information**

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

<b>Section 355 (extremely hazardous substances):</b>	
79-11-8	Chloroacetic acid
<b>Section 313 (Specific toxic chemical listings):</b>	
79-11-8	Chloroacetic acid
<b>TSCA (Toxic Substances Control Act):</b>	
	All ingredients are listed.
<b>California Proposition 65</b>	
<b>Chemicals known to cause cancer:</b>	
	None of the ingredients are listed.
<b>Chemicals known to cause reproductive toxicity for females:</b>	
	None of the ingredients are listed.
<b>Chemicals known to cause reproductive toxicity for males:</b>	
	None of the ingredients are listed.
<b>Chemicals known to cause developmental toxicity:</b>	
	None of the ingredients are listed.

(Contd. on page 8)



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· **Carcinogenic categories**

· <b>EPA (Environmental Protection Agency)</b>
None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH)**

79-11-8 Chloroacetic acid	A4
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.
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· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05

· **Signal word** Danger

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

Chloroacetic acid

· **Hazard statements**

Causes serious eye damage.

· **Precautionary statements**

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

· **National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.
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· **State Right to Know**

CAS: 79-11-8 RTECS: AF 8575000	Chloroacetic acid ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400	13.5-14.5%
CAS: 127-08-2	Potassium Acetate	9.5-10.1%
CAS: 7732-18-5	Water, distilled water, deionized water	73-76%
All ingredients are listed.		

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

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

· **Date of preparation / last revision** 07/14/2015 / 14

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods



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DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 3: Acute toxicity, Hazard Category 3  
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B  
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1