

Revision Date 18-May-2015

WAI1 - AGHS - OSHA

ORION 700011

Revision Number 1

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Product Identifier**

**Product Name** Total Alkalinity Reagent Solution  
**Product Number(s)** 700011-WA  
**Pure substance/mixture** Mixture

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

**Recommended Use** Use as laboratory reagent  
**Uses advised against** No Information available

**Manufacturer/Supplier**

Thermo Fisher Scientific®  
Water and Lab Products  
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**Made in** USA

**Emergency Telephone** 24 Hour Emergency Phone Number  
CHEMTREC®  
Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: 1-703-527-3887  
(collect calls accepted)

**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

**Label Elements****Emergency Overview**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Appearance** Clear

**Physical State** Liquid

**Odor** No information available

Safety data sheet available on request

**Precautionary Statements**

Do not handle until all safety information has been read and understood.

**Hazards not otherwise classified (HNOC)**

No information available

**Other Information**

Toxic to aquatic life with long lasting effects

Toxic to aquatic organisms

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No	Weight %	Trade Secret
Chloroacetic Acid	79-11-8	0 - 10%	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures****General Advice**

Use first aid treatment according to the nature of the injury. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

**Eye Contact**

Rinse thoroughly with plenty of water, also under the eyelids. Obtain medical attention.

**Skin Contact**

Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. If skin reactions occur, contact a physician.

**Inhalation**

Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, obtain medical attention.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Call a

physician or Poison Control Center immediately.

**Protection of First-aiders** Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Most important symptoms and effects, both acute and delayed**

**Most important symptoms/effects** No information available

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**  
No information available

**Specific Hazards Arising from the Chemical**  
No information available

**Explosion Data**  
**Sensitivity to Mechanical Impact** None  
**Sensitivity to Static Discharge** None

**Protective Equipment and Precautions for Firefighters**  
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions** Use personal protective equipment. Refer to Section 8. Evacuate personnel to safe areas.  
**Environmental Precautions** Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Methods and Material for Containment and Cleaning Up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.  
**Methods for Cleaning Up** Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE**

**Precautions for Safe Handling**

**Handling** To avoid risks to human health and the environment, comply with the instructions for use  
Wear personal protective equipment  
Avoid breathing dust/fume/gas/mist/vapours/spray  
Ensure adequate ventilation, especially in confined areas

**Conditions for Safe Storage, Including any Incompatibilities**

**Storage** Keep container tightly closed in a dry and well-ventilated place  
Store at room temperature in the original container  
Keep away from direct sunlight

Incompatible Products No information available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Chloroacetic Acid 79-11-8	TWA: 0.5 ppm Skin	-	-

Appropriate engineering controls

Engineering Measures Showers  
Eyewash stations  
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face Protection Wear chemical splash goggles. If splashes are likely to occur, wear: Face-shield.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection None required under normal usage. In case of inadequate ventilation wear respiratory protection.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

Physical State Liquid  
Appearance Clear  
Odor No information available  
Odor Threshold No information available  
pH Range 2.0 - 5.0

Property	Values	Remarks • Method
Melting point/freezing point	No information available	
Boiling Point/Range	~ 100 °C / 212 °F	
Flash Point (High in °C)	N/A	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature		
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other Information

Softening Point No information available  
 Molecular Weight No information available  
 VOC Content(%) No information available  
 Density No Information available  
 Bulk Density No information available

**10. STABILITY AND REACTIVITY**

**Reactivity**  
 No Information available

**Chemical Stability**  
 Stable under normal conditions

**Possibility of Hazardous Reactions**  
 None under normal processing

**Conditions to Avoid**  
 Extremes of temperature and direct sunlight

**Incompatible Materials**  
 No information available

**Hazardous Decomposition Products**  
 Thermal decomposition can lead to release of irritating gases and vapors

**11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure

Inhalation No information available  
 Eye Contact No information available  
 Skin Contact No information available  
 Ingestion No information available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chloroacetic Acid 79-11-8	55 mg/kg ( Rat )	250 mg/kg ( Rabbit )	0.25 mg/L ( Rat ) 1 h

Information on Toxicological Effects

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available  
 Mutagenic Effects No information available  
 Carcinogenicity No information available.  
 Reproductive Effects No information available  
 STOT - single exposure No information available  
 STOT - repeated exposure No information available  
 Aspiration hazard No information available

Numerical measures of toxicity - Product Information

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

0.38% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Freshwater Algae	Freshwater Fish	Water Flea
Chloroacetic Acid 79-11-8	1.8 mg/L EC50 = 72 h 0.025 mg/L EC50 = 72 h 0.028 mg/L EC50 = 48 h	145 mg/L LC50 96 h	71 - 85 mg/L EC50 48 h 77 mg/L EC50 = 48 h

**Persistence and Degradability**

No information available

**Bioaccumulation/ Accumulation**

No information available

**Mobility**

No information available.

Component	log Pow
Chloroacetic Acid 79-11-8	0.2

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste Disposal Methods**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Improper disposal or reuse of this container may be dangerous and illegal.

Component	CAWAST
Chloroacetic Acid 79-11-8	Toxic Corrosive

**14. TRANSPORT INFORMATION**

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

**RID** Not regulated

**ADR** Not regulated

ADN Not regulated

**15. REGULATORY INFORMATION**

International Inventories

USINV	Complies
CANINV	Complies
EINECS/ELINCS	Complies
ENCS	Does not Comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

USINV/ TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 CANINV/ DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
 ENCS - Japanese Existing and New Chemical Substances  
 IECSC - Chinese Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Component	SARA 313 - Threshold Values %
Chloroacetic Acid - 79-11-8	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
Chloroacetic Acid 79-11-8	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
Chloroacetic Acid 79-11-8	X	X	X

U.S. EPA Label Information

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No information available

**16. OTHER INFORMATION**

<b>Prepared By</b>	Environmental, Health and Safety
<b>Prepared For</b>	Thermo Fisher Scientific Inc.©
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<b>Expiration Date</b>	SDS is valid 3 years from revision date. Contact wai.techservbev@thermofisher.com for the latest revision.
<b>Reason for revision</b>	Update to CLP Format

**Disclaimer**

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**End of Safety Data Sheet**