US

### Safety Data Sheet acc. to OSHA HCS

Printing date 05/27/2021

**1** Identification

Reviewed on 05/27/2021

# · Product identifier · Trade name: Chloramine-T Trihydrate 98%, Reagent A.C.S. • Article number: C3308 · CAS Number: 7080-50-4 · EC number: 204-854-7 · Index number: 616-010-00-9 · Details of the supplier of the safety data sheet · Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586 · Information department: Technical Coordinator Sherman Nelson shermann@aquasolutions.org · Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666 2 Hazard(s) identification · Classification of the substance or mixture GHS08 Health hazard Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. GHS05 Corrosion Skin Corr. 1A H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. Eve Dam. 1 GHS07 Acute Tox. 4 H302 Harmful if swallowed. · Label elements • GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms GHS07 GHS05 GHS08 · Signal word Danger (Contd. on page 2)

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## Trade name: Chloramine-T Trihydrate 98%, Reagent A.C.S.

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· Hazard statements
Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
· Precautionary statements
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of inadequate ventilation wear respiratory protection.
If swallowed: Call a poison center/doctor if you feel unwell.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
Store locked up.
1
Dispose of contents/container in accordance with local/regional/national/international regulations.
· Classification system: · NFPA ratings (scale 0 - 4)
Health = 3 Fire = 1 Reactivity = 0
· HMIS-ratings (scale 0 - 4)
HEALTH *3 $Health = *3$
FIRE 1 Fire = 1
<b>REACTIVITY</b> $0$ <i>Reactivity</i> = 0
· Other hazards
· Results of PBT and vPvB assessment
· <b>PBT</b> : Not applicable.
· <b>vPvB</b> : Not applicable.
3 Composition/information on ingredients
· Chemical characterization: Substances
· CAS No. Description
7080-50-4 Chloramine-T Trihydrate 98%, Reagent A.C.S.
· Identification number(s)
• EC number: 204-854-7
· Index number: 616-010-00-9
US (Contd. on page 3)



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### **4** First-aid measures

#### · Description of first aid measures

- · General information:
- Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
- Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- 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: No special measures required.

#### **6** Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Use neutralizing agent.

Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

- · 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.
- · Protective Action Criteria for Chemicals
- · PAC-1: Substance is not listed.
- · PAC-2: Substance is not listed.
- · PAC-3: Substance is not listed.

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling
- Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

· Information about protection against explosions and fires: No special measures required.

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- · Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- 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 item 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes.

Avoid contact with the eyes and skin.

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

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

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

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Information on basic physical and	chemical properties	
General Information		
Appearance:		
Form:	Crystalline powder	
Color:	White	
Odor:	Chlorine-like	
Odor threshold:	Not determined.	
pH-value:	20	
Change in condition		
Melting point/Melting range:	167 °C (332.6 °F)	
Boiling point/Boiling range:	Undetermined.	
Flash point:	136 °C (276.8 °F)	
Flammability (solid, gaseous):	Product is not flammable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density at 20 °C (68 °F):	1 g/cm <sup>3</sup> (8.345 lbs/gal)	
Bulk density:	$0 \text{ kg/m}^3$	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Not determined.	
Partition coefficient (n-octanol/wat	er): Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	

## **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 No further relevant information available.
- · Incompatible materials: No further relevant information available.

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· Hazardous decomposition products: No dangerous decomposition products known.

### **11** Toxicological information

- · Information on toxicological effects
- Acute toxicity:

#### · LD/LC50 values that are relevant for classification:

Oral LD50 500 mg/kg (ATE)

- · Primary irritant effect:
- on the skin: Strong caustic effect on skin and mucous membranes.
- $\cdot$  on the eye:
- Strong caustic effect.
- Strong irritant with the danger of severe eye injury.
- Sensitization: Sensitization possible through inhalation.
- Additional toxicological information: Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

### **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:
- Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- · 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:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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· Uncleaned packagings:

• *Recommendation: Disposal must be made according to official regulations.* 

TINT NT	
· UN-Number · DOT, IMDG, IATA	UN3263
· UN proper shipping name	
· DON proper snipping name · DOT	Corrosive solid, basic, organic, n.o.s. (Chloramine-T Trihyd
201	98%, Reagent A.C.S.)
· IMDG, IATA	CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (Chloramin
	Trihydrate 98%, Reagent A.C.S.)
· Transport hazard class(es)	
·DOT	
CORROSIVE	
V	
· Class	8 Corrosive substances
· Label	8
· IMDG, IATA	
· Class	8 Corrosive substances
· Label	8
· Packing group	
· DOT, IMDG, IATA	III
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Corrosive substances
• Hazard identification number (Kemler code):	
• EMS Number:	F-A,S-B
Segregation groups	Alkalis
· Segregation Code	SG35 Stow "separated from" SGG1-acids
• Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.

# **15 Regulatory information**

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

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· Sara	(Contd. of page
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	55 (extremely hazardous substances): Substance is not listed.
	3 (Specific toxic chemical listings): Substance is not listed.
	xic Substances Control Act):
	s Air Pollutants Substance is not listed.
Propositio	
	s known to cause cancer: Substance is not listed.
	s known to cause reproductive toxicity for females: Substance is not listed.
	s known to cause reproductive toxicity for males: Substance is not listed.
Chemicals	s known to cause developmental toxicity: Substance is not listed.
Carcinoge	nic categories
	ironmental Protection Agency) Substance is not listed.
	eshold Limit Value) Substance is not listed.
	a (National Institute for Occupational Safety and Health) Substance is not listed.
	l elements The substance is classified and labeled according to the Globally Harmonized System (GHS
Hazard pi	
matana pr	nograms
$\mathbf{X}$	
GHS05	GHS07 GHS08
011303	011507 011508
Signal wo	rd Danger
Hazard st	
	f swallowed.
	vere skin burns and eye damage.
	e allergy or asthma symptoms or breathing difficulties if inhaled.
	nary statements
	eathe dust/fume/gas/mist/vapors/spray.
	oughly after handling.
	t, drink or smoke when using this product.
	ective gloves/protective clothing/eye protection/face protection.
	inadequate ventilation wear respiratory protection.
If swallow	ed: Call a poison center/doctor if you feel unwell.
If swallow	ed: Rinse mouth. Do NOT induce vomiting.
If on skin (	(or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	ED: Remove person to fresh air and keep comfortable for breathing.
	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to d
Continue 1	
	ly call a poison center/doctor.
	eatment (see on this label).
	aminated clothing before reuse.
Store lock	
	ea up. f contents/container in accordance with local/regional/national/international regulations.
	safety assessment: A Chemical Safety Assessment has not been carried out.
Chemical	sujery assessment. A Chemical sujery Assessment has not been carned out.

# **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• Department issuing SDS: Environment protection department.

· Contact:

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· Date of preparation / last revision	
Creation date for SDS 10-15-2015. STN	
Revision 1.0 05-07-2021: updated hazard information. STN	
05/27/2021 / 1.1	
· Abbreviations and acronyms:	
IMDG: International Maritime Code for Dangerous Goods	
DOT: US Department of Transportation	
IATA: International Air Transport Association	
EINECS: European Inventory of Existing Commercial 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	
NIOSH: National Institute for Occupational Safety	
OSHA: Occupational Safety & Health	
TLV: Threshold Limit Value	
PEL: Permissible Exposure Limit	
REL: Recommended Exposure Limit	
Acute Tox. 4: Acute toxicity – Category 4	
Skin Corr. 1A: Skin corrosion/irritation – Category 1A	
Eye Dam. 1: Serious eye damage/eye irritation – Category 1	
Resp. Sens. 1: Respiratory sensitisation – Category 1	
$\cdot$ * Data compared to the previous version altered.	