



# Material Safety Data Sheet

<p><b>NFPA</b></p> 	<p><b>HMIS</b></p> <table border="1" style="margin: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">2</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	1	Reactivity	0	<p><b>Personal Protective Equipment</b></p>  <p>See Section 15.</p>
Health Hazard	2							
Fire Hazard	1							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
<p><b>Common Name/Trade Name</b>      <b>Chloramine-T, Trihydrate</b></p>	<p><b>Catalog Number(s)</b>      CH120</p>	
<p><b>Manufacturer</b>      SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</p>	<p><b>CAS#</b>      7080-50-4; Anhydrous [CAS no. 127-65-1]</p>	
<p><b>Commercial Name(s)</b>      Acti-chlore; Chloralone; Chlorasan; Chloraseptine; Chlorazan; Chlorazene; Chlorazone; Chlorozone; Chlorseptol; Chlorina; Clorosan; Desinfect; Euclorina; Gyneclorina; Kloramin; Kloramine-T; Multichlor; Tampules; Tochlorine; Tolamine</p>	<p><b>RTECS</b>      XT5616800</p> <p><b>TSCA</b>      TSCA 8(b) inventory: No products were found.</p>	
<p><b>Synonym</b>      N-Chloro-4-methylbenzenesulfonamide sodium salt, trihydrate; Tosylchloramide sodium, trihydrate; Benzenesulfonamide, N-chloro-4-methyl-, sodium salt, trihydrate; Sodium Chloramine T, trihydrate; Sodium p-toluenesulfonylchloramide, trihydrate; Sodium tosylchloramide, trihydrate</p>	<p><b>CI#</b>      Not available.</p>	
<p><b>Chemical Name</b>      p-Toluenesulfonamide, N-chloro-, sodium salt, trihydrate</p>	<div style="border: 2px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;"><b><u>IN CASE OF EMERGENCY</u></b></p> <p style="text-align: center; margin: 0;"><b><u>CHEMTREC (24hr) 800-424-9300</u></b></p> <p style="text-align: center; margin: 10px 0 0 0;">CALL (310) 516-8000</p> </div>	
<p><b>Chemical Family</b>      Not available.</p>		
<p><b>Chemical Formula</b>      CH<sub>3</sub>(C<sub>6</sub>H<sub>4</sub>)SO<sub>2</sub>NCINa.3H<sub>2</sub>O</p>		
<p><b>Supplier</b>      SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</p>		

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
1) Chloramine-T, Trihydrate	7080-50-4				100
<p><b>Toxicological Data on Ingredients</b>      <b>Chloramin-T, Trihydrate</b> LD50: Not available. LC50: Not available.</p>					

**Section 3. Hazards Identification**

**Potential Acute Health Effects** Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects** **CARCINOGENIC EFFECTS:** Not available.  
**MUTAGENIC EFFECTS:** Not available.  
**TERATOGENIC EFFECTS:** Not available.  
**DEVELOPMENTAL TOXICITY:** Not available.  
 Repeated or prolonged exposure is not known to aggravate medical condition.

**Section 4. First Aid Measures**

**Eye Contact** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

**Skin Contact** In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact** Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation** Not available.

**Ingestion** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion** Not available.

**Section 5. Fire and Explosion Data**

**Flammability of the Product** May be combustible at high temperature.

**Auto-Ignition Temperature** Not available.

**Flash Points** CLOSED CUP: 192°C (377.6°F).

**Flammable Limits** Not available.

**Products of Combustion** These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...), sulfur oxides (SO<sub>2</sub>, SO<sub>3</sub>...), halogenated compounds. Some metallic oxides.

**Fire Hazards in Presence of Various Substances** Slightly flammable to flammable in presence of heat.

**Explosion Hazards in Presence of Various Substances** Risks of explosion of the product in presence of mechanical impact: Not available.  
 Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions** SMALL FIRE: Use DRY chemical powder.  
 LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards** As with most organic solids, fire is possible at elevated temperatures

**Special Remarks on Explosion Hazards** Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7. Handling and Storage**

<b>Precautions</b>	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area.

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<b>Personal Protection</b>	Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Exposure Limits</b>	Not available.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Solid. (Crystals solid. Crystalline powder.)	<b>Odor</b>	Chlorine-like (Slight.)
<b>Molecular Weight</b>	281.69 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not available.	<b>Color</b>	White to yellowish.
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	170°C (338°F) - 177 C.		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	Not available.		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Soluble in cold water.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Excess heat, incompatible materials, dust generation, air.
<b>Incompatibility with various substances</b>	Not available.
<b>Corrosivity</b>	Non-corrosive in presence of glass.
<b>Special Remarks on Reactivity</b>	Decomposed by alcohol. Air sensitive. Decomposes slowly in air, liberating chlorine. Loses water on drying.
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Inhalation. Ingestion.
<b>Toxicity to Animals</b>	LD50: Not available. LC50: Not available.
<b>Chronic Effects on Humans</b>	Not available.
<b>Other Toxic Effects on Humans</b>	Hazardous in case of skin contact (irritant), of ingestion, of inhalation.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	May affect genetic material (mutagenic)
<b>Special Remarks on other Toxic Effects on Humans</b>	<p>Potential Health Effects:</p> <p>Skin: Causes skin irritation.</p> <p>Eyes: Causes eye irritation, and conjunctivitis, but no serious injury.</p> <p>Inhalation: Inhalation of dust causes respiratory tract irritation. Causes respiratory tract sensitization, asthmatic symptoms (bronchial obstruction). May cause methemoglobinemia, an increase of methemoglobin in the blood resulting in defficient oxygenation of the blood. Methemoglobinemia is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis(a bluish discoloration of the skin due to defficient oxygenatioin of the blood), rapid heart rate, and chocolate-brown blood.</p> <p>Ingestion: May be harmful if swallowed. May affect behavior/central nervous system (somniaence, convulsions, excitement, muscle weakness, spastic paralysis with or without sensory change), respiration(respiratory depression, cyanosis, chronic pulmonary edema, emphysema). May cause methemoglobinemia, an increase of methemoglobin in the blood resulting in defficient oxygenation of the blood. Methemoglobinemia is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis(a bluish discoloration of the skin due to defficient oxygenatioin of the blood), rapid heart rate, and chocolate-brown blood.</p>

**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	The products of degradation are more toxic than the product itself.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

**Section 13. Disposal Considerations**

**Waste Disposal** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14. Transport Information**

**DOT Classification** Not a DOT controlled material (United States).

**Identification** Not applicable.

**Special Provisions for Transport** Not applicable.

**DOT (Pictograms)**

**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations** No products were found.

**California Proposition 65 Warnings** California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.  
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

**Other Regulations**

For Chloramine-T, anhydrous(CAS no. 127-65-1):  
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS no. 204-854-7).  
Canada: Listed on Canadian Domestic Substance List (DSL).  
China: Listed on National Inventory.  
Japan: Listed on National Inventory (ENCS).  
Korea: Listed on National Inventory (KECI).  
Philippines: Listed on National Inventory (PICCS).  
Australia: Listed on AICS.  
For Chloramine-T, Trihydrate (CAS no. 7080-50-4):  
EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances.  
Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non-Domestic Substances List (NDSL).  
China: Not listed on National Inventory.  
Japan: Not listed on National Inventory (ENCS).  
Korea: Not listed on National Inventory (KECI).  
Philippines: Not listed on National Inventory (PICCS).  
Australia: Not listed on AICS.

**Other Classifications**

**WHMIS (Canada)** CLASS D-2A: Material causing other toxic effects (VERY TOXIC).  
WHMIS Class D-2B: Material causing other toxic effects (TOXIC).

**DSCL (EEC)**

R22- Harmful if swallowed.	S7- Keep container tightly closed.
R31- Contact with acids liberates toxic gas.	S22- Do not breathe dust.
R34- Causes burns.	S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
R42- May cause sensitization by inhalation.	S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
	S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**HMIS (U.S.A.)**

Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	E

**National Fire Protection Association (U.S.A.)**

Health



Flammability

Reactivity

Specific hazard

WHMIS (Canada)  
(Pictograms)



DSCL (Europe)  
(Pictograms)



TDG (Canada)  
(Pictograms)



ADR (Europe)  
(Pictograms)



Protective Equipment



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

### Section 16. Other Information

MSDS Code C4020

References Not available.

Other Special Considerations Major Uses: Detection of bromate and halogens; antibacterial; Vet. topical antiseptic; root canal irrigating solution in dentistry; emergency sterilization of drinking water and for sanitization.

Validated by Sonia Owen on 1/23/2012.

Verified by Sonia Owen.

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CALL (310) 516-8000

[Notice to Reader](#)

Continued on Next Page

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*