

HydroChlor[™]

Material Safety Data Sheet

Chloramine T

Section 1 - Chemical Product and Company Identification

MSDS Name: Chloramine T Product Name: Hydrochlor Synonyms: Benzenesulfonamide, N-Chloro-4-Methyl-, Sodium Salt; Sodium, (N-Chloro-p-toluenesulfonamido)-; Tosylchlora Company Identification: ANHUI BBCA PHARMACEUTICAL CO.,LTD For information, call: 0086 551 4846007 Emergency Number: 0086 551 4846007 For CHEMTREC assistance, call: 0086 551 4846007 For International CHEMTREC assistance, call: 4846007

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINC S
127-65-1	Chloramine T	90 - 100%	unlisted

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white to yellow crystalline powder.

Danger! Corrosive. Causes eye and skin burns. May cause sensitization by inhalation. Methemoglobin former - can cause cyanosis. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. Air sensitive.

Target Organs: Blood, respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye burns. May cause chemical conjunctivitis and corneal damage.

Skin: Causes skin burns. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color. May cause skin sensitization based on the its potential as a respiratory sensitizer.

Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. Methemoglobinemia is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), rapid heart rate and chocolate-brown colored blood. Overexposure may cause methemoglobinemia. May cause systemic effects.

Inhalation: Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. May cause systemic effects. May cause respiratory sensitization.

Chronic: May cause methemoglobinemia, which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, breath shortness, cyanosis (bluish skin due to deficient oxygenation of blood), rapid heart rate, unconsciousness and possible death. Effects may be delayed.

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Section 4 - First Aid Measures

Eyes: Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes. **Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Absorption of this product into the body may cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). Moderate degrees of cyanosis need to be treated only by supportive measures: bed rest and oxygen inhalation. For methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin concentration in the blood. Cleansing of the entire contaminated area of the body is of utmost importance.

Antidote: Methylene blue, alone or in combination with oxygen is indicated as a treatment in nitrite induced methemoglobinemia.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Flash Point: 278e deg F (136.67 deg C)

Autoignition Temperature: Not available.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 1; Instability: 0 Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Flush spill area with water. Provide ventilation. Place under an inert atmosphere.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Use with adequate ventilation. Avoid contact with skin and eyes. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Avoid ingestion and inhalation. Do not ingest or inhale. Handle under an inert atmosphere. Store protected from air. Discard contaminated shoes.

Storage: Store in a cool, dry place. Keep container closed when not in use. Keep away from water. Keep containers tightly closed. Do not expose to air. Store under an inert atmosphere.

Section 8 - Exposure Controls, Personal Protection Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Chloramine T	none listed	none listed	none listed

OSHA Vacated PELs: Chloramine T: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder Appearance: white to yellow Odor: chlorine-like - weak odor pH: 8.0-10.0 (5%aq. soln) Vapor Pressure: Not available. Vapor Density: 0.6 Evapor ation Rate: Not available. Viscosity: Not available. Boiling Point: Not available. Freezing/Melting Point: 167-177 deg C Decomposition Temperature: Not available. Solubility: Reacts with water. Specific Gravity/Density: 1.43 Molecular Formula: C7H7CINNaO2S.3H2O Molecular Weight: 281.5975

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Air sensitive. Contact with acids liberates toxic gas. Contact with water gives off hypochlorous acid. Has been reported as being explosive after azeotropic distillation (A liquid mixture of two or more substances that retains the same composition in the vapor state as in the liquid state when distilled or partially evaporated under a certain pressure). **Conditions to Avoid:** Exposure to air, temperatures above 130°C.

Incompatibilities with Other Materials: Oxidizing agents, acids.

Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, oxidesof nitrogen, oxides of sulfur, carbon dioxide, chloride fumes.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 127-65-1unlisted. LD50/LC50: Not available. Carcinogenicity: CAS# 127-65-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information found. Teratogenicity: No information found. Reproductive Effects: No information found. Mutagenicity: No information found. **Neurotoxicity:** No information found **Other Studies:** No information found

Section 12 – Ecological Information

No information available

Section 13 – Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part 173.154. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed

RCRA R-Series: None listed

Section 14 – Transport Information

Shipping Name	CORROSIVE SOLID, BASIC,			
ORGANIC, N.O.S. (Chloramine T)				
Hazard Class:	8			
UN Number	UN3263			
Packing Group				

49 CFR Part 173.154 Exceptions for Class 8 (corrosive material)

Limited quantities (by group): Inner package not over 11 lbs., gross package weight less than 66 lbs. Proper Shipping Name: Consumer Commodity Primary Hazard Class/Division: ORM-D

Section 15 – Regulatory Information

US FEDERAL TSCA CAS# 127-65-1 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

Health & Safety Reporting List None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules None of the chemicals in this product are under a Chemical Test Rule.

Section 12b None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act: None of the chemicals in this product are listed as Hazardous Subdstances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

STATE CAS# 127-65-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65 California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols: C

Risk Phrases: R 22 Harmful if swallowed. R 31 Contact with acids liverates toxic gas. R 34 Causes burns. R 42 May cause sensitization by inhalation.

Safety Phrases: S22 Do not breathe dust. S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S 7 Keep container tightly closed.

WGK (Water Danger/Protection) CAS# 127-65-1: No information available. Canada - DSL/NDSL None of the chemicals in this product are listed on the DSL or NDSL list. Canada - WHMIS This product has a WHMIS classification of D2B. Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 5/12/2008 **Revision #7 Date:** 3/18/2003 The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall BBCA be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if BBCA has been advised of the possibility of such damages.

WHITEHALL MANUFACTURING www.whitehallmfg.com

P.O. Box 3527 City of Industry, CA 91744-0527 U.S.A. Ph: (800) 782-7706 Fax: (626) 855-4862