



**Sierra Chemical Co.**

## Material Safety Data Sheet

This MSDS has been prepared within the guidelines of the Federal OSHA Hazard Communication Standard, 29CFR 1910.1200.

**Product Name:** Sierra Sani Chlor / Sierra Pure Chlor / Sierra Bleach / Sierra Sanitizer

### I. GENERAL INFORMATION

**Manufacturer:** Sierra Chemical Co. **Emergency Phone:** (800) 424-9300  
**Address:** 2302 Larkin Cr. **Information Phone:** (775) 358-0888  
 Sparks, NV 89431 **CHEMTREC Phone:** (800) 424-9300  
**Date:** 12-20-06 **Supersedes:** 9-23-05

### II. PRODUCT IDENTIFICATION

**Proper Shipping Name:** Hypochlorite Solution **Chemical Formula:** NaOCl  
**Synonyms/Common Names:** Liquid Bleach, Liquid Chlorine **Chemical Family:** Acid Salts, Oxidizers  
**CAS Number:** 7681-52-9

### III. PHYSICAL DATA

**Appearance and Odor:** Light greenish-yellow liquid, chlorine-like odor.  
**Boiling Point:** Decomposes on heating **Vapor Pressure @ 25° C:** No data  
**Water Solubility:** Miscible **Specific Gravity:** 1.08 - 1.26  
**pH @ 25°C:** 11.5 (approximately) **Molecular Weight:** 75.45 (NaOCl Active ingredient)

### IV. INGREDIENTS/IDENTITY INFORMATION

Component	CAS No.	OSHA PEL/TLV	%
Sodium Hypochlorite	7681-52-9	Not Established	5-15
Sodium Chloride	7647-14-5		5-11
Sodium Hydroxide	1310-73-2	2 mg/m <sup>3</sup>	.5-2.0
Water	7732-18-5		Balance

**V. FIRE AND EXPLOSION DATA****Flash Point:** N/A**Auto-ignition Temperature:** N/A**LEL:** N/A**UEL:** N/A

**Extinguishing Media:** Use any media appropriate for surrounding fire. Use water to cool containers exposed to fire.

**Special Fire Fighting Procedures:** Wear NIOSH approved self-contained breathing apparatus (SCBA) and protective clothing to prevent direct contact with the material (to include, but not limited to; boots, gloves, hard hat and impervious clothing).

**Unusual Fire and Explosion Hazards:** None

**VI. STABILITY/REACTIVITY DATA**

**Stability:** Unstable  Stable

**Hazardous Polymerization:** May Occur  Will Not Occur

**Conditions to Avoid:** High temperatures, sunlight and ultraviolet light. Decomposition will result from contact with iron and copper. Do not store at temperatures above 60-70o F (15-21o C). This product has a shelf life of up to 6 months at 60o F or lower.

**Incompatibility:** This product is incompatible with iron, copper, acids, ammonium compounds, organics and other oxidizers. It will react violently with phenyl acetonitrile, cellulose and ethylene.

**Hazardous Decomposition or Byproducts:** Produces toxic chlorine gas upon contact with acids.

**VII. TOXICOLOGICAL INFORMATION/HEALTH HAZARD DATA**

This product is harmful if inhaled or ingested and is harmful if contacted by the skin or eyes. The reported threshold for odor is approximately 0.9 mg/m<sup>3</sup> based on the odor of chlorine. Symptoms which may be aggravated by exposure are asthma, respiratory and cardiovascular disease.

**Eye Contact:** Contact with eyes will cause irritation. It may also cause burns to the eyes or impairment of vision and corneal damage.

**Skin Contact:** Contact with skin can cause burns and/or irritation. Symptoms of contact are redness, swelling and scab formation of contacted area. If prolong exposure occurs, it can cause damage to the secondary tissue resulting in the inability of regeneration to the affected area.

**Inhalation:** Sodium Hypochlorite when inhaled is irritating to the nose, mouth, throat, and lungs. Burns to the respiratory tract may occur with production of lung edema which could result in shortness of breath, wheezing, choking, chest pain, and impairment of lung function. High concentrations can result in permanent lung damage. Repeated exposure can cause impairment of lung function and permanent lung damage.

**Ingestion:** Irritation and/or burns can occur to the entire gastro-intestinal tract. Symptoms are characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding, and/or tissue ulceration.

**Exposure Limit Information:** There is no established PEL for sodium hypochlorite. The Federal OSHA Permissible Exposure Limit (PEL) for sodium hydroxide is 2 mg/m<sup>3</sup>.



## VIII. EMERGENCY AND FIRST AID

If a known exposure occurs or if poisoning is suspected, do not wait for symptoms to develop. Immediately initiate the recommended procedures below. Simultaneously contact a Poison Control Center, a physician or the nearest hospital. Inform the person contacted of the type and extent of exposure, describe the victim's symptoms and follow the advice given. For additional information call, **CHEMTREC (800) 424-9300**.

**Eye Contact:** Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention as soon as possible. Oils or ointments should not be used. Continue the flushing for an additional 15 minutes if the physician is not immediately available.

**Skin Contact:** Immediately remove contaminated clothing and shoes under a safety shower. Flush all affected areas with large amount of water for at least 15 minutes. Do NOT attempt to neutralize with chemical agents. Obtain medical attention as soon as possible.

**Inhalation:** Nausea, headaches and dizziness are signs that a person should stop working and be taken to fresh air immediately until symptoms are gone. Should breathing become difficult, give oxygen. Keep the person warm, resting and contact a physician. A person could inhale enough vapors to lose consciousness. This person should be moved to fresh air. Call a physician immediately. If breathing stops, artificial respiration should be given immediately. In all cases, ensure adequate ventilation and provide respiratory protection before returning to work.

**Ingestion:** Do NOT induce vomiting. Immediately give large quantities of water. If vomiting does occur, give fluids again. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician or the nearest Poison Control Center immediately.

## IX. PROTECTIVE EQUIPMENT REQUIREMENTS

**Ventilation Requirements:** Local exhaust ventilation if vapors, mists, or aerosols are present. If these are not present use general exhaust ventilation.

**Respiratory Requirements:** Due to low volatility and toxicity, a respirator is not normally needed. However, if vapors, mists, or aerosols are generated, wear a NIOSH/MSHA approved respirator.

**Additional Protective Clothing:** Use chemical safety goggles and impermeable gloves. Use rubber apron to protect body from splashing conditions.

**Other:** Safety shower and eye-wash station recommended.

## X. HANDLING AND STORAGE

**Normal Handling:** Store in vented, closed, clean, non-corrosive containers in a cool, dry, well ventilated location, away from direct sunlight and from chemicals which may react with the bleach if spillage occurs. If closed containers become heated, the containers should be vented to release decomposition product. **Do not** mix or contaminate with ammonia, hydrocarbon, acids, alcohols, ethers.

Do not store at temperatures above 60-70°F (15-21°). This product has a shelf life of up to six months at 60°F or lower. **DO NOT** package in metal containers.



**Material Release or Spills:** Always wear personal protective equipment including, but not limited to; boots gloves and impervious clothing. If hazardous concentrations are found in the local spill area, use a NIOSH/MSHA approved respirator. Vapors may be suppressed by the use of a water fog and all water runoff should be captured for treatment and disposal. Dike or contain spill by using a compatible absorbent such as sand, clay, soil or commercial absorbents.

## XI. SPILL OR LEAK HANDLING

### IN CASE OF AN EMERGENCY, CALL CHEMTREC (800) 424-9300

Any person responding to a spill or leak should use a NIOSH/MSHA approved respirator. Additional protective clothing must be worn to prevent direct contact with the material. This includes (but is not limited to) boots, gloves, hard hat, and impervious clothing. Compatible materials are neoprene, butyl rubber, viton, and saranex.

Hazardous concentrations may be found in the local spill area and immediately downwind. Vapors may be suppressed by the use of a water fog and all water run off should be captured for treatment and disposal. Dike or contain by using a compatible absorbent such as sand, clay, soil, commercial absorbents. Use vacuum or pump operation to remove product released and treat before disposal. Dispose of spill residues per guidelines in Section "XII Disposal" of this MSDS.

## XII. ENVIRONMENTAL-REGULATORY STATUS/DISPOSAL

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and non-hazardous wastes.

**EPA Hazardous Substance Status:** Reportable Quantity (RQ) = 100 lbs. NOTICE: this product contains chlorine which is listed in the Toxic Substance Control Act (TSCA) and is subject to reporting requirements of EPCRA Section 313.

**RCRA Status of Unused Material if Discarded:** Not a hazardous waste. As a non-hazardous waste, this material should be disposed of in accordance with Federal, State and local regulations by treatment in a wastewater treatment system.

## XIII. TRANSPORTATION DATA

**DOT Proper Shipping Name:** Hypochlorite Solution

**Hazard Class:** 8      **UN I.D. Number:** UN1791      **PACKING GROUP:** III

**Reportable Quantity:** 100 lbs. (80 Gallons 12.5% Solution)

## XIV. ADDITIONAL INFORMATION

All information is offered in good faith, without guarantee or obligation for the accuracy or sufficiency thereof, or the results obtained, and is accepted at user's risk. The uses referred to are for the purpose of illustration only. User should investigate and establish the suitability of such use(s) in every case. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending license under valid patents.