

**MATERIAL SAFETY DATA SHEET: CLC-501****Section I - General Information**

(000000-000000- - 174C)

**Date of Issue:**  
7/11/2007 12:00:00 AM**Supersedes:**  
4/24/2003 12:00:00 AM**Chemical Name & Synonyms:**  
N/A**Trade Name & Synonyms:**  
CLC-501**Chemical Family:**  
Alkaline solution**Formula is a mixture:** []**Manufacturer Name:**  
CHEM-AQUA, INC**Manufacturer Address:**  
BOX 152170  
IRVING, TEXAS 75015**Prepared By:**  
M MCDOWELL/CHEMIST**Product Code Number:**  
0807**Emergency Phone Number:**  
800-424-9300**Section II - Hazardous Ingredients**

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

<b>Chemical Name (Ingredients)</b>	<b>Hazard</b>	<b>TLV</b>	<b>PEL</b>	<b>STEL</b>	<b>CAS #</b>
SODIUM TRIPOLYPHOSPHATE	IRRITANT	N/E 1	N/E 2	N/E	7758-29-4
NONYLPHENOL POLYETHYLENE GLYCOL ETHER	IRRITANT	N/E 1	N/E 2	N/E	127087-87-0
SODIUM SILICATE	IRRITANT	N/E 1	N/E 2	N/E	1344-09-8

**Section III - Physical Data**

<b>Boiling Point (°F):</b> 220	<b>Specific Gravity (H<sub>2</sub>O=1):</b> 1.04
<b>Vapor Pressure (mm Hg):</b> 16.6	<b>Color:</b> Green
<b>Vapor Density (Air=1):</b> 0.6	<b>Odor:</b> Slight
<b>pH @ 100% :</b> 12.4	<b>Clarity:</b> Transparent
<b>% Volatile by Volume:</b> 94	<b>Evaporation Rate (BuAc=1):</b> 0.5
<b>H<sub>2</sub>O Solubility:</b> Complete	<b>Viscosity:</b> Non-viscous

**Section IV - Fire and Explosion Hazard****Flash Point:** >200°F  
**Flammable Limits:** Hydrogen gas  
**LEL:** 4%**Method Used:** T.C.C.  
**UEL:** 75%**Aerosol Level (NFPA 30B):** N/A**Extinguishing Media:**

<input checked="" type="checkbox"/> Foam	<input checked="" type="checkbox"/> Alcohol Foam	<input checked="" type="checkbox"/> CO <sub>2</sub>
<input checked="" type="checkbox"/> Dry Chemical	<input checked="" type="checkbox"/> Water Spray	<input type="checkbox"/> Other

**NFPA 704 Hazard Rating:**

4-Extreme	Health: 2
3-High	Flammability: 1
2-Moderate	Instability: 0
1-Slight	Special:
0-Insignificant	

**Special Fire Fighting Procedures:**

Firefighters should wear a self-contained breathing apparatus and full protective gear. Extinguishing media should be chosen based on the nature of the surrounding fire. Cool fire-exposed containers with water spray to prevent bursting.

**Unusual Fire and Explosion Hazards:**

Prolonged contact with reactive metals, such as Aluminum, Copper, Brass, Bronze, Chromium, Magnesium, Tin, Zinc, and alloys, can cause the formation of flammable Hydrogen Gas which can form an explosive mixture with air. Use care as spills may be slippery.

---

## **Section V - Health and Hazard Data**

**Threshold Limit Value:**

Not Established.

**Effects of Overexposure:****Acute: (Short Term Exposure)**

**EYE CONTACT:** Causes severe irritation seen as stinging, tearing, redness, and a burning sensation.

**SKIN CONTACT:** Causes severe irritation seen as redness, itching, and a burning sensation. Product may be absorbed through the skin in harmful amounts.

**INHALATION:** Mist causes respiratory irritation seen as coughing and sneezing.

**INGESTION:** Causes irritation with possible nausea, vomiting, and diarrhea.

**Chronic: (Long Term Exposure)**

No human chronic effects known.

Medical conditions aggravated by exposure are pre-existing respiratory and skin conditions such as asthma, emphysema, and dermatitis.

**TARGET ORGANS:** None known. There is no primary route of entry into the body. The primary routes of exposure are skin and eye contact.

**Primary Routes of Entry**

Inhalation       Ingestion       Absorption

**Emergency First Aid Procedures:****Inhalation:**

Remove from the area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

**Eye Contact:**

Immediately rinse the eyes with water. Remove any contact lenses and continue flushing for at least 15 minutes. Hold the eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Get immediate medical attention.

**Skin Contact:**

Immediately remove contaminated clothing and shoes. Flush affected areas with large amounts of water for 20 to 30 minutes. Get immediate medical attention. Discard clothing and shoes.

**Ingestion:**

Give 3 to 4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.

**Notes to Physician:**

There is no specific antidote. Treat the patient symptomatically.

---

## **Section VI - Toxicity Information**

**Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:**

IARC       NTP       OSHA       ACGIH       Other

VOC content: 0.1% by weight; 0.1% by volume; 0.7 g/L

SODIUM TRIPOLYPHOSPHATE	
IHL-RAT LC <sub>50</sub> : >0.39 mg/L/4H	3.
ORL-RAT LD <sub>50</sub> : 3,120 mg/Kg	4.
SKN-RBT LD <sub>50</sub> : > 4,640 mg/Kg	3.
ORL-RAT TDLO: 2,730 MG/KG/13W-I Changes To Spleen Weight	4.
SKN-RBT SDT: 500mg/24H MOD	4.
EYE-RBT: 3.3/110, Slightly Irritating	3.
SKN-RBT: 0-0/8.0 (24 Hr. Exp); Not Irritating	3.
ORL-RAT LD <sub>50</sub> : 3,900 mg/Kg	3.
SKN-RBT LD <sub>50</sub> : >7,940 mg/Kg	3.

Rats fed Sodium Triphosphate Anhydrous in their diet for two years exhibited decreased growth, increased kidney/body weight ratios, and kidney changes. 3.

NONYLPHENOL POLYETHYLENE GLYCOL ETHER	
ORL-RAT LD <sub>50</sub> : 1.3 G/KG	3.
SKN-RBT LD <sub>50</sub> : 2 ml/kg/24hr occluded	3.
SKN-RBT: no irritation (uncovered)	3.
EYE-RBT: 0.5 ml @ 5% dilution (severe corneal injury)	3.

Contains surfactant which, based on studies with rabbits involving the sustained occluded contact of the undiluted surfactant with skin, indicate that such conditions may result in the development of inflammatory changes in the lung. Several studies have resulted in slightly increased kidney weights in male rats continuously exposed to nonylphenol at dietary concentrations of 200 ppm or greater. Tubular degeneration was observed at 650 and 2000 ppm. 3.

SODIUM SILICATE	
ORL-RAT LD <sub>50</sub> : 1,500-3,200 mg/kg (100% solids basis)	3.
ORL-RAT: 200,600,1800 ppm/3 Months; Changes in the blood chemistry	3.
ORL-RAT: 600,1200 ppm; Decreased # of births and survival to weaning	3.
ORL-DOG: 2.4 gm/kg/Day/4 Weeks; Kidney Effects	3.
SKN-RBT SDT: 500 mg/24H SEV	4.
EYE-RBT SDT: 10 mg/24H SEV	4.
ORL-RAT LD <sub>50</sub> : 1,960 mg/kg	4.
SKN-RBT LD <sub>50</sub> : >4,640 mg/kg	4.

EYE: Corneal and iridal involvement, severe conjunctival irritation, ocular irritation, ocular irritation still present 7 days after treatment. If yielded a score of 19.7 after 1 day and 4.0 after 14 days. 3.

PRIMARY SKIN IRRITATION SCORE: 3 to Abraded Skin, 0 to Intact Skin. Experience has Shown product when getting on collars and cuffs. Causes irritation. 3.

## Section VII - Reactivity Data

<b>Stability</b> <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable  <b>Conditions to Avoid:</b> None known.	<b>Hazardous Polymerization</b> <input checked="" type="checkbox"/> Will not occur <input type="checkbox"/> May occur  <b>Conditions to Avoid:</b> N/A
--	--

### Incompatibility (Materials to Avoid):

Strong oxidizing agents such as Chlorine bleach and concentrated Hydrogen Peroxide; acids, bases, and Ammonium salt solutions. Prolonged contact with reactive metals, such as Aluminum, Copper, Brass, Bronze, Chromium, Magnesium, Tin, Zinc, and alloys, can cause the formation of flammable Hydrogen gas which can form an explosive mixture with air.

### Hazardous Decomposition Products:

Oxides of Carbon, Phosphorus, and Sodium; Ammonia, amines, and Hydrogen Chloride.

## Section VIII - Spill Or Leak Procedures

### Steps to be Taken if Material is Released or Spilled:

Wear appropriate protective clothing. Use care as spills may be slippery. Shut off source of leak. Dike and contain spill. Absorb with an inert material and transfer all material into a properly labeled container for disposal. Prevent product from contaminating soil or from entering sewage and drainage systems and bodies of water. Flush area with water.

**Waste Disposal Method(s):**

Dispose of in accordance with all Federal, state, and local regulations.

**Neutralizing Agent:**

Use dilute acids such as Hydrochloric Acid or vinegar. Add cautiously while mixing. Wear appropriate protective clothing.

## Section IX - Special Protection Information

**Required Ventilation:**

Local ventilation is recommended to control exposure from operations that can generate excessive levels of mists. Local ventilation is preferred, because it prevents dispersion into work areas by controlling it at its source.

**Respiratory Protection:**

Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH approved half-facepiece respirator equipped with appropriate chemical cartridges may be used. For concentrations greater than 10 times the TLV and/or PEL, consult the NIOSH respirator decision logic found in publication No. 87-116 or ANSI Z88.2-1992.

**Glove Protection:**

Neoprene or nitrile rubber gloves should be worn. Ensure compliance with OSHA's personal protective equipment (PPE) standard for hand protection, 29 CFR 1910.138.

**Eye Protection:**

Chemical goggles should be worn when handling. Ensure compliance with OSHA's Personal Protective Equipment (PPE) standard for eye and face protection, 29 CFR 1910.133.

**Other Protection:**

Wear protective clothing when handling. A safety shower and an eyewash station should be available.

## Section X - Storage and Handling Information

**Storage Temperature**

Max: 120°F      Min: 35°F

**Storage Conditions**

Indoors       Outdoors       Heated       Refrigerated

**Precautions to be Taken in Handling and Storing:**

Always store material in its original container. Keep container tightly closed when not in use. Keep from freezing. If product freezes, allow it to slowly warm to room temperature and stir thoroughly before using.

**Other Precautions:**

Keep out of reach of children. Read the entire label before using the product. Follow the label directions. Traces of free Ethylene Oxide and Propylene Oxide may be present in this product and could accumulate in the headspace of storage and transport vessels.

## Section XI - Regulatory Information

**Chemical Name****CAS Number****Upper % Limit**

None.

Those Ingredients listed above are subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Please call 1-800-527-9919 for additional information if you are a California customer. This MSDS is not intended for users in the state of California.

## Section XII - References

1. Threshold Limit Values for chemical substances and physical agents and biological exposure indices, ACGIH, 2007.
2. OSHA PEL.
3. Vendor's MSDS.
4. Registry of toxic effects of chemical substances, CCINFOWeb, 2007.
5. European Chemical Substances Information System (ESIS), International Uniform Chemical Information Database (IUCLID) Chemical Data Sheets.

All the components of this product are in compliance with the Toxic Substances Control Act (TSCA) and are either listed on the TSCA inventory or otherwise exempted from listing.

---

IRR: Irritant, OSHA: Occupational Safety & Health Administration, IARC: International Agency for the Research on Cancer, TOX: Toxic, NFPA: National Fire Protection Association, ppm: Parts Per Million, UEL: Upper Explosion Limit, STEL: Short-term Exposure Limit, SKN: Skin, IHL: Inhalation, COMB: Combustible, CORR: Corrosive, MUT: Mutagenic, CARC: Carcinogenic, N/A: Not Applicable, TLV: Threshold Limit Value, N/E: Not Established, ORL: Oral, FLAM: Flammable, ASPHYX: Asphyxiant, C.O.C.: Cleveland Open Cup, PNOR: Particles Not Otherwise Regulated, LEL: Lower Explosion Limit, mg/L: Milligrams per Liter, PNOS: Particles Not Otherwise Specified, g/L: Grams per Liter, PMCC: Pinsky-Martin Closed Cup, NTP: National Toxicology Program, µg/L: Micrograms per Liter, TCC: Tagliabue Closed Cup, SEV: Severe, RBT: Rabbit, INV: Intravenous, ACGIH: American Conference of Governmental Industrial Hygienists, PEL: Permissible Exposure Limit, MOD: Moderate, IPT: Intraperitoneal, gm/kg: Grams per Kilogram, C.C.C.: Cleveland Closed Cup, HMN: Human, mg/m<sup>3</sup>: Milligrams per Cubic Meter, mg/kg: Milligrams per Kilogram, VOC: Volatile Organic Compound, SDT: Standard Draize Test, MSE: Mouse, GPG: Guinea Pig.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT OF CURRENT FORMULATION. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

CHEM-AQUA, INC assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage, or disposal of the product.

©2008 NCH Corporation All rights reserved.