Product Name: Cloro Pool Liquid Shock
Date: 4/11/2022

SECTION 1 ***IDENTIFICATION***

Supplier: Phoenix Products Company
55 Container Drive
Terryville, CT 06786
(800) 928-7665

Distributor:

U.S. PERS Emergency Telephone: 1-800-633-8253
Product Name: **Cloro Pool Liquid Shock**
Synonyms: Sodium hypochlorite solution; Antiformin; Bleach; Chloride of soda
Chemical Name: Sodium Hypochlorite
Chemical Formula: ClNaO
CAS Number: 7681-52-9
Product Use: Oxidizes swimmer waste and raises chlorine levels in pool water.

SECTION 2 ***HAZARDOUS COMPONENTS***

EMERGENCY OVERVIEW:
DANGER!
CORROSIVE

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

Hazard Statement(s)

H314: Causes severe skin burns and eye damage
H302: Harmful if swallowed
H332: Harmful if inhaled
H335: May cause respiratory irritation
H400: Very toxic to aquatic life

Precautionary Statement(s)

P264: Wash skin thoroughly after handling.
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection
P310: Immediately call a POISON CENTER/doctor
P363: Wash contaminated clothing before reuse
P321: Specific treatment (see First Aid Measures on this label).
P403+P233: Store in a well-ventilated place. Keep container tightly closed
P501: Dispose of contents/container in accordance with national and international regulations

SECTION 2 *HAZARDOUS COMPONENTS - Continued*

HMIS Classification	
Health Hazard	3
Flammability	0
Physical Hazard	0

NFPA Rating	
Health Hazard	3
Fire	0
Reactivity Hazard	0

POTENTIAL HEALTH EFFECTS

Inhalation: May be harmful if inhaled. Causes severe irritation and burns. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin Contact: May be harmful if absorbed through skin. Causes severe irritation and skin burns.

Eye Contact: Causes severe irritation and eye burns.

Ingestion: May be harmful if swallowed. Causes severe irritation and burns. May cause damage to the mouth, esophagus and stomach.

Hazards not otherwise classified (HNOC) or not covered by GHS
Contact with acids liberates toxic gas.

SECTION 3 *COMPOSITION/INFORMATION ON INGREDIENTS*

Component	CAS Number	Percent
Sodium Hypochlorite	7681-52-9	12.5 %

SECTION 4 *FIRST-AID MEASURES*

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move person into fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Skin Contact: Take off contaminated clothing and shoes immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician. Do not reuse clothing and shoes until cleaned.

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion: Do NOT induce vomiting. If fully conscious, rinse mouth with water. If unconscious, take immediately to a hospital or a physician. Never give anything by mouth to an unconscious person.

SECTION 5 *FIRE-FIGHTING MEASURES*

Conditions of Flammability: Not flammable or combustible.

Suitable Extinguishing Media: Dry Powder

Special hazards arising from the substance or mixture: Hydrogen chloride gas, Sodium oxides

Hazardous Combustion Products: Hazardous decomposition products formed under fire conditions. – Hydrogen chloride gas, Sodium oxides.
Firefighting Methods: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors.

Advice For firefighters: Wear self contained breathing apparatus for firefighting if necessary.

SECTION 6 *ACCIDENTAL RELEASE MEASURES*

Personal precautions, protective equipment and emergency procedures: Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Do not flush with water. Keep in suitable, closed containers for disposal.

SECTION 7 *HANDLING AND STORAGE*

Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death.

Storage: CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Relieve pressure in containers weekly. Do not freeze. Avoid temperatures greater than 70 Deg. F. Product degrades more rapidly with increasing temperature.

SECTION 8 *EXPOSURE CONTROLS/PERSONAL PROTECTION*

Permissible Exposure Limits

Ingredient CAS No.	OSHA		WISHA		ACGIH (TLV)		USA Workplace Environmental Exposure Levels (WEEL)
	TWA	STEL	TWA	STEL	TWA	STEL	STEL
7681-52-9	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	2 mg/m3

SECTION 8 *EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued*

Appropriate Engineering Controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal Protective Equipment

Eye/Face Protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Other Protective Equipment: Eye-wash station, safety shower, rubber apron, chemical safety shoes, protective clothing.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

SECTION 9 *PHYSICAL AND CHEMICAL PROPERTIES*

Form:	Light yellow to green clear liquid
Odor:	Chlorine odor.
Odor Threshold:	0.9 ppm
pH:	12
Melting Point/Freezing Point:	-30 - -20˚C (-22 - -4˚F)
Initial Boiling Point and Boiling Range:	111˚C (232˚F)
Flash Point:	Not Applicable
Evaporation Rate:	Not Available
Flammability (solid, gas):	Not Available
Upper/Lower Flammability or Explosive Limits:	Not Available
Vapor Pressure:	23.3 hPa (17.5 mmHg) at 20˚C (68˚F)
Vapor Density:	>1
Relative Density:	1.206 g/mL at 25˚C (77˚F)
Specific Gravity:	1.190 - 1.215 @ 25˚C
Solubility In Water:	100%
Partition coefficient (n-octanol/water):	Not Available
Auto-ignition Temperature:	Not Available
Decomposition Temperature:	Not Available
Viscosity:	Not Available
Explosive Properties:	Not Available
Oxidizing Properties:	Not Available

SECTION 10 ***STABILITY AND REACTIVITY***

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions.

Conditions to Avoid: Avoid exposure to light. Avoid temperatures greater than 70 Deg. F. Product degrades more rapidly with increasing temperature.

Incompatible Materials: Ammonia, Organic materials, Acids, Amines, Ammonium salts, Aziridine, Methanol, Reducing agents, Oxidizing agents, Iron, Copper, Bisulfates, Phenyl acetonitrile, Cellulose, Ethyleneimine, Oxidizable metals, Soaps.

Hazardous Decomposition Products: Chlorine-containing gases. Reacts with acids to release poisonous chlorine gas/Sodium oxide.

SECTION 11 ***TOXICOLOGICAL INFORMATION***

Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Hypochlorite	Rat: 8200 mg/kg	Rabbit: >10000 mg/kg	No Data

Skin Corrosion/Irritation: no data available
Serious Eye Damage/Eye Irritation: no data available
Respiratory or Skin Sensitisation: no data available
Germ Cell Mutagenicity: no data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: no data available

Specific Target Organ Toxicity - Single Exposure: no data available
Specific Target Organ Toxicity - Repeated Exposure: no data available

Aspiration Hazard: no data available

Additional Information
RTECS: Not available

Burning sensation, cough, wheezing, laryngitis, shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

SECTION 12 *ECOLOGICAL INFORMATION*

Ecotoxicological Information: DATA PROVIDED ARE FOR SODIUM HYPOCHLORITE

Freshwater Fish Toxicity:
LC50 clupea harengus 0.033 - 0.097 mg//l/96 hr, flow through bioassay (pH: 8)
LC50 cymatogaster aggregata 0.045 - 0.098 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 gasterosteus aculeatus 0.141 - 0.193 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 oncorhynchus gorbuscha 0.023 - 0.052 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 oncorhynchus kisutch 0.026 - 0.038 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 oncorhynchus mykiss: 0.05-0.771 mg/L/96 hr, flow through
LC50 oncorhynchus mykiss: >0.03-<0.19 mg/L/96 hr, semi-static
LC50 oncorhynchus mykiss: 0.18-0.22 mg/L/96 hr, static
LC50 parophrys vetulus 0.044 - 0.144 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 pimephales promelas 0.22 - 0.62 mg/l/96 hr, flow through bioassay (pH: 7)
LC50 pimephales promelas: 4.5-7.6 mg/L/96 hr, static
LC50 lepomis macrochirus: 0.4-0.8 mg/L/96 hr, static
LC50 lepomis macrochirus: 0.28-1 mg/L/96 hr, flow through

Invertebrate Toxicity:
EC50 ceriodaphnia sp. 0.006 mg/l/24 hr
EC50 daphnia magna 0.07 - 0.7 mg/l/24 hr
EC50 daphnia magna 2.1mg/l/96 hr
EC50 gammarus fasciatus 4 mg/l/96 hr
EC50 nitocra spinipes 40 mg/l/96 hr
EC50 palaemonetes pugio 52 mg/l/96 hr

Other Toxicity:
Algae:
ErC50 dunaliella sp. 0.6 mg/l/24 hr
ErC50 dunaliella tertiolecta 0.11 mg/l/24 hr
ErC50 skeletonema costatum 0.095 mg/l/24 hr

Chemical Fate Information:
BIODEGRADATION: This material is inorganic and not subject to biodegradation.
PERSISTENCE: This material is believed not to persist in the environment.
BIOCONCENTRATION: This material is not expected to bioconcentrate in organisms.

Results of PBT and vPvB Assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other Adverse Effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

SECTION 13 *DISPOSAL CONSIDERATIONS*

Waste Treatment Methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging: Dispose of as unused product.

SECTION 14 *TRANSPORTATION INFORMATION*

DOT:

UN Number:	ORM-D
UN Proper Shipping Name:	ORM-D
Transport Hazard Class:	ORM-D
Packing Group:	ORM-D

Consumer commodity (ORM-D) means a material that is packaged and distributed in a form intended or suitable for sale through retail sales agencies or instrumentalities for consumption by individuals for purposes of personal care or household use. Valid until December 31, 2020.

TDG:

UN Number:	1791
UN Proper Shipping Name:	Hypochorite Solution
Transport Hazard Class:	8
Packing Group:	III
Marine Pollutant:	No

MEX:

UN Number:	1791
UN Proper Shipping Name:	Hypochorite Solution
Transport Hazard Class:	8
Packing Group:	III
Marine Pollutant:	No

IMDG:

UN Number:	1791
UN Proper Shipping Name:	Hypochorite Solution
Transport Hazard Class:	8
Packing Group:	III
EMS-No:	F-A, S-B
Marine Pollutant:	No

IATA:

UN Number:	1791
UN Proper Shipping Name:	Hypochorite Solution
Transport Hazard Class:	8
Packing Group:	III

SECTION 15 *REGULATORY INFORMATION*

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA 302 Components: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA Title III Section 311/312 Category Hazards:

Immediate (Acute):	Yes
Delayed (Chronic):	No
Fire Hazard:	Yes
Pressure Release:	No

SECTION 15 ***REGULATORY INFORMATION - Continued***

Reactive: No

Regulated Components:

Component: Sodium Hypochlorite
CAS Number: 7681-52-9
CERCLA RQ: Yes
SARA EHS: No
SARA 313: No
U.S. HAP: No
WI HAP: No
Prop 65: No

NSF/ANSI Standard 60 Maximum Use Level: 84 mg/L.

Massachusetts Right To Know Components:	CAS-No.	Revision Date
Sodium hypochlorite	7681-52-9	2007-03-01

Pennsylvania Right To Know Components:	CAS-No.	Revision Date
Sodium hypochlorite	7681-52-9	2007-03-01

New Jersey Right To Know Components:	CAS-No.	Revision Date
Sodium hypochlorite	7681-52-9	2007-03-01

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 ***OTHER INFORMATION***

No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers.

Date: 4/11/2022
Phoenix Products Company