

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Swim Pure Chemical Name: Sodium Hypochlorite Solution

Distributor: Amrex Chemical Co. Inc.

P.O. BOX 642

Binghamton, NY 13902

www.amrexchemical.com

Telephone: (607) 772-8784

Fax: (607) 772-8786

Emergency Phone No.: CHEMTREC (800) 424-9300 (24 Hour emergency)



Recommended use of the chemical and restrictions on use:

MUL: 84 mg/l

Swimming pool chlorinator, hard surface cleaner, mildecide, water treatment chemical, biocides, bleach solutions and bleach fixer solutions. No restrictions known.

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazard Classification:

Skin Corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity, single exposure	Category 3
(Respiratory tract irritation)	
Corrosive to metals	Category 1
Hazardous to the aquatic environment, acute hazard	Category 1
Hazardous to the aquatic environment, long-term hazard	Category 2

Signal Word: DANGER!

Symbol(s) (pictogram(s)):







Hazard statement(s):

Causes severe skin burns and eye damage.

May cause respiratory irritation.

May be corrosive to metals.

Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement(s):

Prevention: Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist or vapor. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Keep only in original container. Avoid release to the environment.

Response:

If Swallowed: Rinse mouth. Do NOT induce vomiting.

If Inhaled: Remove person to fresh air and keep comfortable for breathing.

If on Skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards not otherwise classified: Contact with acids liberates toxic gas.

NFPA Rating

Health hazard: 3

Fire: 0

Reactivity Hazard: 1 Special hazards: COR

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical: Sodium Hypochlorite Solution

Common Name/Synonyms: Liquid Bleach, Liquid Chlorine Bleach, Soda Bleach

Formula: NaOCL

Component	CAS NUMBER	Concentration (%)
Sodium Hypochlorite	7681-52-9	12.5-15
Sodium Chloride	7647-14-5	11-14.5
Sodium Hydroxide	1310-73-2	0.5-1.5

4. FIRST AID MEASURES

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact: Take off immediately all contaminated clothing. Wash IMMEDIATELY with plenty of water for at least 15-20 minutes. Get medical attention immediately. Wash contaminated clothing before reuse. Call a physician or poison control center immediately.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed: Corrosive effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Immediate medical attention and special treatment needed, if any: Treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. With eye exposure, continue flushing during transport to hospital. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Water fog, foam, dry chemical powder, Carbon Dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire. Do not use dry extinguishing media that contains ammonium compounds.

Specific hazards from combustion: During fire, gases hazardous to health may be formed.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion: Do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions/ Protective equipment/Emergency procedures: Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Absorb spillage to prevent material damage. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of the SDS.

Environmental precautions: Do not discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up:

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal see Section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling: Wear appropriate personal protective equipment. Do not get in eyes, on skin, or on clothing. Chemical attack increases with solution strength. Use with adequate ventilation. Observe good industrial hygiene practices. Do not apply heat or direct sunlight. Temperature and product concentration affect product quality and decomposition rates.

Conditions for safe storage/Incompatibilities: Keep container tightly closed. Store in a cool and well-ventilated place. Store in a corrosive resistant container. Consult container manufacturer for additional guidance. Store away from and do not mix with incompatible materials such as acids, oxidizers, organics, reducing agents, and all metals except titanium. For frozen product, contact manufacturer for guidance.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	OSHA PEL	OSHA STEL	OSHA CEILING	ACGIH TLV
Sodium Hydroxide	2mg/m3	**	***	2mg/m3 Ceiling
Sodium Hydroxide IDLH 10 mg/m3				

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

Personal protective equipment:

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Hand protection: Wear appropriate chemical resistant gloves.

Eye protection: Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

Skin and body protection: Wear appropriate chemical resistant clothing. Reports indicate that sodium hypochlorite can react with various fabrics usually increasing with concentration. Reactions vary significantly depending on strength of chemical, material, fabric treatment and color of dyes. FRC treated cotton has a stronger response than plain cotton. Poly blend fabrics and meta aramid fabric have a weaker response than natural fibers. Contact the Personal Protective Equipment manufacturer for specific information about their products. Protective material types include Natural Rubber, Neoprene, Nitrile, Polyvinyl Chloride (PVC).

Wear appropriate thermal protective clothing when necessary.

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow to greenish liquid

Odor: Pungent, characteristic bleach odor

Odor threshold: 0.9 mg/m3 (0.3 ppm)

pH: 12-14 (25° C/77° F)

Melting point/freezing point: -17° F (-27.22° C) (16% solution)

Initial boiling point and boiling range: 230 °F (110° C)

Flash point: Not applicable

Evaporation rate: No data available

Flammability (solid, gas): Not available

Upper/lower flammability or explosive limits: Not applicable

Vapor pressure: 12 mm Hg (12.5% solution)

Vapor density: Not available

Relative density: 9.9-10.5 lb. /gal

Specific Gravity: 1.22

Solubility(ies): Completely miscible

Partition coefficient: n-octanol/water: Not available

Auto-ignition temperature: Not applicable

Decomposition temperature: Not available

Viscosity: Not available

Other Information:

Bulk Density: Not applicable Molecular Weight: 74.5 g/mol

10. STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Contact with incompatible materials. Avoid ultraviolent (UV) light sources. Avoid excessive heat. Reacts violently with strong acids. Acid contact will product chlorine gas. Amine contact will produce chloramines.

Incompatible materials: Strong oxidizing agents, acids, metals, organic compounds, ammonia.

Hazardous decomposition products: No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation: Vapors and spray mist may irritate throat and respiratory system and cause coughing.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

Skin: Causes skin burns.

Eye contact: Causes eye burns.

Symptoms of exposures:

Delayed and immediate effects: Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. Not classified as an Aspiration Hazard however, droplets of the product may be aspirated into the lungs through ingestion or vomiting and may cause a serious chemical pneumonia.

Chronic effects from short- and long-term exposure: Prolonged or repeated overexposure causes lung damage.

Numerical measures of toxicity:

Sodium Hypochlorite, 5-17% Acute Dermal LD50 Rabbit

> 2g/kg

Oral L

Species

LD50 Rat

3-5 g/kg

Test Results

Potential or suspected carcinogen based upon listing on NTP, IARC, or by OSHA: Not classified as to carcinogenicity to humans.

12. ECOLOGICAL INFORMATION

Product

Ecotoxicity (aquatic and terrestrial): Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Sodium Hypochlorite, 5-17% (CAS Mixture)					
Aquatic					
Fish	LC50	Bluegill (Lepomis macrochirus)	0.6 mg/l, 48 hrs		
Crustacea	EC50	Daphnia Magna	0.07-0.7mg/l, 24 hrs		
	EC50	Daphnia Magna	2.1 mg/l, 96 hrs		
Algae	ErC50	dunaliella sp	0.6mg/l, 24 hrs		
	ErC50	dunaliella tertiolecta	0.11 mg/l, 24 hrs		
	ErC50	skeletonema costatum	0.095 mg/l, 24 hrs		

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: Not available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warning potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Waste Residue:

Handling of waste residue/Methods of disposal: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways, or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Disposing of contaminated packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

UN number: UN1791

UN proper shipping name: Hypochlorite Solutions

Transport hazard class: 8

Subsidiary class(es): -

Packing group, if applicable: PG III

Environmental hazards (e.g., Marine pollutant): Reportable Quantity 100 lbs.

15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 311/312 Hazardous Chemical:

Hazard Categories:

Immediate Hazard: YES
Delayed Hazard: NO
Fire Hazard: NO
Pressure Hazard: NO
Reactivity Hazard: NO

SARA 302 Extremely Hazardous Substance: Not Listed

SARA 313 (TRI Reporting): Not regulated

Other Federal Regulations:

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not Regulated

CERCLA Hazardous Substance List (40 CFR 302.4): Reportable Quantity 100 lbs.

U.S. Drug Enforcement Administration Listed Chemical: Not Listed

U.S. Department of Homeland Security Appendix A Listed Chemical: Not Regulated

16. OTHER INFORMATION

Date of preparation/version of the data sheet: May 2015

Further Information:

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