

SAFETY DATA SHEET

Revision Date: June 23, 2014

Page 1 of 7

SECTION 1: IDENTIFICATION**Product Identifier****Product Name:** Chlo-Cide; EPA No. 3522-21**Recommended Use of the Chemical and Restrictions on Use****Recommended Use:** Liquid chlorine bleach sanitizing solution**Details of the Supplier of the Safety Data Sheet**

Supplier Address: Luseaux Laboratories, Inc. Luseaux Laboratories Inc.
 4625 N Santa Fe Drive or 16816 Gramercy Place
 Kingman, AZ 86401 Gardena, CA 90247

Emergency Telephone Number

Company Phone Number: Arizona Location: 928-692-0192
 California Location: 310-324-1555

Emergency Telephone: CHEMTREC: 1-800-424-9300**SECTION 2: HAZARDS IDENTIFICATION****Appearance:** Pale yellow liquid**Physical State:** Liquid**Odor:** Pungent chlorine odor**Classification**

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (acute respiratory tract irritation)	Category 3
Hazardous to the aquatic environment, acute	Category 1
Hazardous to the aquatic environment, long-term hazard	Category 2

**Signal Word****Danger****Hazard Statements**

May be corrosive to metals. Causes severe skin burns and eye damage. May cause respiratory irritation. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Mix this product only with water according to label directions. Mixing this product with gross filth such as feces, urine, etc. or with ammonia, acids, detergents or other chemicals may release hazardous gases irritating to eyes, lungs and mucous membranes.

Precautionary Statements – 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. Contact with acids liberates toxic gas.

Precautionary Statements – Response

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 or doctor/physician.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

Precautionary Statements – Storage

Store in a cool dry area away from direct sunlight.. Keep container tightly closed. Store locked up.

Precautionary Statements – Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations. For guidance, contact your State Water Board or Regional Office of the EPA.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Sodium Hypochlorite	7681-52-9	6.2 to 7.0
Sodium Hydroxide	1310-73-2	Not identified*

*The specific percentages are not identified due to "Trade Secret" status. In emergency situation, further information may be obtained by calling the emergency information number listed above. Reference 29 CFR 1910.1200

SECTION 4: FIRST AID MEASURES

First Aid Measures

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.

Skin Contact: Take off immediately all contaminated clothing. Wash off 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.

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

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 and Effects, both Acute and Delayed

Symptoms Corrosive effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians 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.

General Information 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.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Water fog. Dry chemical powder. Carbon dioxide (CO₂)

Unsuitable Extinguishing Media: 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 Arising from the Chemical

During fire, gases hazardous to health may be formed.

Protective equipment and precautions for firefighters

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 and consider the hazards of other involved materials. No unusual fire or explosion hazards noted.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions: 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. Environmental manager must be informed of all major releases.

Methods and Material for Containment and Cleaning Up

Methods 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 recover, 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.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling: Wear appropriate personal protective equipment. Do not get in eyes, on skin, on clothing. 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, Including and Incompatibilities

Storage Conditions: Keep container tightly closed and store in a cool, dry and well-ventilated place.

Incompatible Materials: Store away from and do not mix with incompatible materials such as acids, oxidizers, organics, reducing agents, and all metals except titanium. Mixing this product with gross filth such as feces, urine, etc. or with ammonia, acids, detergents or other chemicals may release hazardous gases irritating to eyes, lungs and mucous membranes.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

US Workplace Environmental Exposure Level (WEEL) Guides

Sodium Hypochlorite (CAS 7681-52-9): 2 mg/m³ (STEL)

Appropriate Engineering Controls

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. Eye wash facilities and emergency shower must be available when handling this product.

Individual Protections Measures, such as Personal Protective Equipment

Eye/Face 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 gloves. Wear appropriate chemical resistant clothing. Reports indicate that sodium hypochlorite can react with various fabrics usually increasing with concentration. Reactions vary significantly depending upon 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.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable), an approved respirator must be worn.

General Hygiene Considerations:

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information and Basic Physical and Chemical Properties

Physical State: Liquid

Odor: Pungent chlorine

Appearance: Pale yellow liquid

Color: Pale yellow

Odor Threshold: 0.9 mg/m³

Property	Value	Property	Value
pH – 1% solution	Approx: 13.0	Melting/freezing point	-4° F (-20°C) (7% sol'n)
Boiling point	Not available	Flash point	Not applicable
Evaporation rate	Not determined	Flammability	Not available
Flammability limits/ air	Not applicable	Vapor pressure	12 mm Hg (20°C/68°F)
Vapor density	Not available	Specific gravity	1.11
Water solubility	Completely miscible	Solubility in other solvents	Not determined
Partition coefficient	Not available	Auto-ignition temp	Not applicable
Decomposition temp	Not determined	Kinematic viscosity	Not determined
Dynamic Viscosity	Not determined	Explosive properties	Not determined
Oxidizing properties	Not determined	Bulk Density	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity

This 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

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Contact with incompatible materials. Avoid ultraviolet (UV) light sources. Excessive heat. Reacts violently with strong acids. Acid contact will produce 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.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact	Causes eye burns.
Skin Contact	Causes skin burns.
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.

Acute toxicity Occupational exposure to the substance or mixture may cause adverse effects.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hypochlorite, 7681-52-9	3 – 5 g/kg (Rat)	> 2 g/kg (Rabbit)	-

Information on Physical, Chemical and Toxicological Effects

Symptoms Corrosive effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Prolonged or repeated overexposure causes lung damage.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACHIH, NTP, or OSHA.

Numerical Measures of Toxicity-Product

Not determined

SECTION 12: ECOLOGICAL INFORMATION

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

Component	Crustacea	Fish
Sodium Hypochlorite, 7681-52-9	Daphnia – 1 mg/l	Bluegill (Lepomis macrochirus) – 0.6 mg/l, 48 hours

Persistence and degradability: No data is available
Bioaccumulative potential: No data is available
Mobility in soil: Not available
Other adverse effects: No other adverse environmental effects are expected from this component.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations. For guidance, contact your State Water Board or Regional Office of the EPA.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations. For guidance, contact your State Water Board or Regional Office of the EPA.

SECTION 14: TRANSPORT INFORMATION

Based on package size, product may be eligible for limited quantity exception. Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT UN 1791, HYPOCHLORITE SOLUTION, 8, PG III

SECTION 15: REGULATORY INFORMATION

International Inventories

Legend:
 Not determined

US Federal Regulations This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Sodium hydroxide, 1310-73-2	LISTED
Sodium hypochlorite, 7681-52-9	LISTED

SARA 311/312 Hazardous YES

SARA 313 (TRI reporting) Not regulated

CWA (Clean Water Act)

Not regulated

Component	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Sodium Hydroxide, 1310-73-2	1000 lb			X

US State Regulations

California Proposition 65

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

SECTION 16: OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Reactivity
	3	0	1

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of publication. The information is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet