



SAFETY DATA SHEET

REVISED 3/10/20

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: Tornado Bleach

Product code(s): 8 (As classified by 49 CFR 173 due to destruction over time of steel and aluminum)

Synonyms: Sodium Hypochlorite Solution, Bleach Solution, Bleach Liquor, Hypo-solution, Bleach, Liquid Bleach

REACH Registration Number: The materials in this product have been registered according to Regulation (EC) 1907/2006.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses: Cleaner, Disinfectant, Biocide and Sanitizer

Uses Advised Against: None

1.3 Details of the Supplier and of the Safety Data Sheet (SDS)

All Florida Paper 9150 NW 105th WAY Medley, Florida 33178 305-835-6060

1.4 Emergency telephone number:

CHEMTEL 1-888-255-3924

SECTION II - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Classification REGULATION (EC) No 1272/2008

Skin Corrosiveness: 1B; Skin Irritant: 2

Eye Irritant: 2 Aquatic Acute: 1

Description: Clear, greenish-yellow liquid; chlorine-like odor. Irritating to eyes, skin and respiratory system. Can cause burns

to all areas contacted.

2.2 Label elements

Labeling Regulation (EC) No 1272/2008

Hazard pictograms





Signal word:

DANGER

Hazard statements:

[Prevention]

H314 – Causes severe skin burns and eye damage

H319 – Causes serious eye irritation H400 – Very toxic to aquatic life P260 – Do not breathe dusts or mists.

P264 – Wash hands or any exposed skin areas thoroughly after handling.

P273 – Avoid release to the environment.

P280 – Wear protective gloves/protective/clothing/eye protection/face protection.

[Response] P301 + P330 + P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P363 – Wash contaminated clothing before reuse.

P304 + 340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 – Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 – If eye irritation persists: Get medical advice/attention.

P391 – Collect spillage.

[Storage] P405 – Store locked up.

[Disposal] P501 – Dispose of container in accordance with local/regional/national/international regulations.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC





Risk phrases: R31 – Contact with acids liberates toxic gas.

R34 – Causes burns.

R36/38 – Irritating to eyes and skin. R50 – Very toxic to aquatic organisms.

Safety phrases: S1/2 – Keep locked up and out of the reach of children.

S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 – After contact with skin, wash immediately with plenty of soap-suds.

S37/39 – Wear suitable gloves and eye/face protection.

S45 – In case of accident or if you feel unwell, seek medical advice immediately (Show the label whenever possible).

S50 – Do not mix with acids or other incompatible materials (refer to section 10). S60 – This material and its container must be disposed of as hazardous waste.

Additional labeling: EUH031 – Contact with acids liberates toxic gas.

SECTION III - COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

Chemical nature: Sodium hypochlorite, aqueous solution

| % by Weight | Ingredient | CAS Number | EC Number | Index Number | EC Classification |
|-------------|---------------------|------------|-----------|--------------|---------------------|
| 3.0 - 4.0 | Sodium Hypochlorite | 7681-52-9 | 231-668-3 | 017-011-00-1 | C, R34; R31: N, R50 |
| 0.05 - 0.2 | Sodium Hydroxide | 1310-73-2 | 215-185-5 | 011-002-00-6 | Xi, 36/38 |
| 95.8 - 96.9 | Water | 7732-18-5 | 231-791-2 | | |

3.2 Mixtures - Not applicable

SECTION IV - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product vapors or mists cause respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention immediately.

Eyes: Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting upper and lower lids. Remove contact lenses after the first 5 minutes and continue washing. Obtain immediate medical attention, preferably from an ophthalmologist.

Skin: Flush skin with large amounts of water while removing contaminated clothing. Wash affected area with soap and water. Wash contaminated clothing and shoes thoroughly before reuse. Seek prompt medical attention if rash develops.

Ingestion: Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: Causes severe eye irritation and burns. Symptoms include redness, pain, itching, burning sensation and tearing. Material is extremely destructive to eyes, mucous membranes and surrounding tissues.

Skin: Causes severe skin irritation and burns. Symptoms include redness, pain, itching and burning sensation. May be harmful if absorbed through the skin.

Inhalation: Vapors and mists may be harmful is inhaled, causing sore throat and cough. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: May cause severe gastrointestinal tract irritation with abdominal pain, burning sensation, cough, diarrhea, sore throat and vomiting. May cause burns and irritation to mucous membranes of the mouth and to tissues of the digestive tract.

Chronic: Repeated or prolonged contact with spray mist may produce chronic eye irritation, severe skin irritation and/or respiratory tract irritation leading to frequent attacks of bronchial infection.

SECTION V - FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: Material does not burn. Use fire extinguishing media appropriate for surrounding materials. **Unsuitable methods of extinction:** None listed

5.2 Special hazards arising from the substance or mixture

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat. During emergency conditions overexposure to toxic decomposition products may cause a health hazard. Fire may cause the evolution of chlorine, hydrogen chloride gas and chlorine oxides. Symptoms may not be immediately apparent. Obtain immediate medical attention.

5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If possible, firefighters should control run-off water to prevent environmental contamination.

SECTION VI - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors/mists. Avoid contact with skin and eyes. Wear appropriate protective clothing designated in Section 8. Ventilate the area. Evacuate personnel to safe areas.

6.2 Environmental precautions

Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways. Contain and recover liquid when possible.

6.3 Methods and materials for containment and cleaning up

Cover drains. Cover with a large quantity of inert absorbent (e.g. sand, vermiculite, kitty litter, dry earth). Do not use combustible materials such as saw dust. Collect product using a shovel and place into approved container for proper disposal as hazardous waste. For large spills use water spray to divert vapor drift. Observe possible material restrictions (section 7.2 and 10.5). Clean contaminated area with water. Do not mix with other cleaning agents that may liberate chlorine gas vapors.

US Regulations (CERCLA) require reporting spills and releases to soil water and air in excel of reportable quantities. Reportable quantity (RQ) for hypochlorite solutions is $45.36 \, \mathrm{kg}$ (100 lbs).

Reportable Quantity (RQ): 100 lbs or 45.36 kg (approximately 367 gal or 1,353 L of Aspen White sodium hypochlorite). In the event of a spill (e.g. defined as any release to the environment), call Lions Sales Group LLC and/or the emergency contact numbers as soon as possible for assistance.

For releases higher than the Reportable Quantity (RQ), you must notify the State Emergency Response Commission at (800) 320-0519 AND the National Response Center at (800) 424-8802 or (202) 267-2675 within 15 minutes!!!

In the event of a spill, contact either hazardous chemical response company or Lions Sales Group LLC for assistance. Lions Sales Group has a contract with American Compliance Technology, Inc. (ACT) out of Bartow, Florida to perform emergency response and hazardous material and environmental services cleanup for its facilities, its transportation vehicles and its customer's facilities and transportation vehicles. They can be reached at 800-226-0911.

6.4 Reference to other sections

For indications about waste treatment, see section 13.

SECTION VII - HANDLING AND STORAGE

7.1 Precautions for safe handling

Observe label precautions. Avoid contact with skin and eyes. Wear all appropriate protective equipment specified in Section 8. Wash thoroughly after handling. Keep containers closed when not in use. Use proper equipment for listing and transporting all containers.

Advice on protection against fire and explosion

Material is non-flammable and non-combustible.

7.2 Conditions for safe storage, including any incompatibilities

Keep in cool, dry, ventilated storage areas in closed containers. Protect against physical damage. Isolate from incompatible substances. Do not store near acids, heat, oxidizable materials or organics.

Store in a receptacle equipped with a vent. Transfer only to approved containers having correct labeling. Containers that have been opened should be carefully resealed and kept upright to prevent leakage. Do not take internally. Keep locked up and out of reach of children.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION VIII - EXPOSURE CONTROLS AND PERSONNEL PROTECTION

8.1 Control parameters

| Components | CAS Number | OSHA | ACGIH | AIHA (WEEL) |
|------------------|------------|--------------------------|-----------------------------------|--------------------------|
| Sodium | 7681-52-9 | 2 mg/m ³ TWA; | 0.5 ppm as CL ₂ TWA; | 2 mg/m ³ STEL |
| Hypochlorite | | skin | 1 ppm as CL ₂ STEL, A4 | _ |
| Sodium Hydroxide | 1310-73-2 | 2 mg/m ³ TWA | 2 mg/m³ Ceiling | |

8.2 Exposure controls

Engineering Measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. See section 7.1.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory and at the end of the workday.

Eye/face protection: Wear tightly fitting protective goggles and a face shield (8-inch minimum). Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

Hand Protection: Wear gloves recommended by glove supplier for protection against materials in section 3. Gloves must be inspected prior to use. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Other protective equipment: Wear impervious, protective chemical resistant clothing including boots, gloves, lab coat, apron or coveralls as appropriate to the situation to prevent skin contact.

Respiratory Protection: Always use an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose 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).

Environmental exposure controls: Do not empty into drains.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Clear, greenish yellow colored liquid

Odor Pungent, chlorine-like
Odor Threshold No data available

Molecular Weight74.44 (sodium hypochlorite)Chemical FormulaNaOCl (sodium hypochlorite)

pH 10 – 12

Freezing Point -13.9° C (7° F)

Initial Boiling Point 100° C (212° F) – lowest known value

Evaporation Rate <1 (BuAc = 1) Flammability (solid, gas) No data available **Flash Point** No data available **Autoignition Temperature** No data available **Decomposition Temperature** 110° C (230° F) **Lower Explosive Limit (LEL)** No data available **Upper Explosive Limit (UEL)** No data available Vapor Pressure No data available Vapor Density No data available

Relative Density 1.10 - 1.12 g/ml (9.17 - 9.34 lb/gal) @ 60 ° F

Viscosity No data available

Solubility in Water Complete

Partition Coefficient: No data available

n-octanol/water

Volatiles by Volume @ 70° FNo data available; decomposes leaving salt solution

9.2 Other data - No data available

SECTION X - STABILITY AND REACTIVITY

10.1 Reactivity

Slowly decomposes on contact with air. Rate increases with the concentration and temperature. Exposure to sunlight accelerates decomposition.

10.2 Chemical stability

Stable under recommended storage conditions. Slowly decomposes on contact with air. Rate increases with the concentration and temperature. Exposure to sunlight accelerates decomposition. Sodium hypochlorite becomes less toxic with age.

10.3 Possibility of hazardous reactions

Avoid excessive heat and sources of ignition. Flammable hydrogen may be generated from contact with metals such as: aluminum, brass, tin, zinc and alloys of these metals. Avoid contact with acids, halogenated organics, organic nitro compounds and glycols. Hazardous gases may be generated from contact with acids, ammonium hydroxide (aqua ammonia) or cleaners containing ammonia compounds. Violent reactions may occur with some organic compounds. Sodium hypochlorite reacts readily with various reducing sugars (e.g. fructose, galactose, maltose, dry whey solids) to produce carbon monoxide. Precautions should be taken including atmospheric monitoring of the tank to ensure safety of personnel. Hazardous polymerization will not occur.

10.4 Conditions to avoid

Light, heat, air and contact with incompatible materials (see section 10.5).

10.5 Incompatible materials

Ammonia, amines, ammonium salts, aziridine, methanol, phenyl acetonitrile, cellulose, ethyleneimine, organic materials, oxidizable metals/powdered metals, acids, soaps and bisulfates. Forms shock-sensitive mixtures with certain other materials.

10.6 Hazardous decomposition products

Thermal decomposition products include chlorine gas, hydrogen chloride gas, hydrochloric acid, sodium oxide. Decomposition rate increases with temperature.

SECTION XI - TOXILOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Oral Toxicity (Sodium Hypochlorite)

TDLo - 1gm/ kg oral (woman)
TDLo - 45mg/kg intravenous (man)

LD₅₀ - 5,800 mg/kg (mouse)

LD₅₀ - 140 mg/kg - 9 week(s) continuous oral (rat)

Acute inhalation toxicity

May cause severe bronchial irritation, sore throat with possible blistering, coughing, stomatitis, nausea, labored breathing, shortness of breath and pulmonary edema. 10-20 mg/m3 causes burning of the nose and throat; 40-60 mg/m3 may be fatal. If sufficient amounts are absorbed, may cause effects as detailed in acute ingestion.

Acute dermal toxicity

Extent of damage depends on concentration, pH, and volume of solution and duration of contact. May cause redness, pain, blistering, itchy eczema and chemical burns. Sensitization reactions are possible in previously exposed persons.

Skin irritation

Skin irritation - 24 h (Rabbit)

Eve irritation

Rabbit, Adult – 10 mg, moderate irritation

May cause redness, pain, and blurred vision. Solutions of 5% splashed in human eyes have caused a burning sensation and later only slight superficial disturbance of the corneal epithelium which cleared completely in the next day or two without special treatment. However, one animal study reports a 5% solution causing only moderate irritation with clearing within 7 days. A higher concentration of 15% tested on rabbit eyes caused immediate severe pain, hemorrhages, rapid onset of ground-glass appearance of the corneal epithelium, moderate bluish edema of the whole cornea, chemosis and discharge for several days. Such eyes have sometimes healed in 2-3 weeks with slight or no residual corneal damage but they had neovascularization of the conjunctiva and distortion of the nictitating membrane by scarring.

Sensitization

May cause allergic skin reaction

Genotoxicity in vitro

No data available

Mutagenicity

Mutation in micro organisms – Salmonella typhimurium 1mg / plate (-S9)

DNA repair – Escherichiacoli 20 µg/ disc;

DNA damage – Esoherichiacoli 420 µmol/L;

Phage inhibition capacity – Esoherichiacoli 103 µg/ well

Micronucleus test - non-mammalian species multiple 200 ppb

Cytogenetic analysis - non-mammalian species multiple 120 µg/L

Cytogenetic analysis – human lymphocyte 100 ppm 24hour(s)

 $Sister\ chromatid\ exchange-human\ embryo\ 149\ mg/\ L$

Cytogenetic analysis – hamster lung 100 mg/ L

Aspiration hazard

No test data available. Risk of serious damage to lungs by aspiration.

Specific organ toxicity - single exposure

No data available

Specific organ toxicity - repeated exposure

May cause allergic skin reactions, dermatitis (allergic and contact) and asthma or bronchitis. Sensitization reactions are reported in individuals who are exposed in small amounts through their water supply. High doses have caused sperm abnormality in mice.

Additional information RTECS: Not available

11.2 Further information

Ingestion: May cause irritation and erosion of the mucous membranes, vomiting (possibly bloody) and abdominal pain and spasms. A drop in blood pressure, shallow respiration, edema (possibly severe) of pharynx, larynx, and glottis, confusion, convulsions, delirium and coma may occur. Cyanosis and circulatory collapse are possible. Esophageal or gastric perforation and strictures are rare. Death may occur, usually due to complications of severe local injury such as toxemia, shock, perforations, hemorrhage, infection and obstruction. Massive ingestions may produce fatal hyperchloremic metabolic acidosis or aspiration pneumonitis.

Further data: Handle in accordance with good industrial hygiene and safety practice.

Chronic Effects

Persons with impaired respiratory function may be more susceptible to the effects of this substance.

Sodium Hypochlorite (hypochlorite salts) is listed by IARC as a Group 3 Carcinogen – Not classifiable as to its carcinogenicity to humans. Sodium Hydroxide is not listed by IARC. None of the components of this product are listed as carcinogens by ACGIH, IARC, NTP or OSHA. No data is available regarding its mutagenicity and/or teratogenicity of this material, nor is there any available data that indicates it causes adverse developmental and/or fertility effects.

SECTION XII - ECOLOGICAL INFORMATION

12.1 Toxicity Aquatic Ecotoxicity:

This product is very toxic to aquatic organisms.

Aquatic Ecotoxicity:

Acute and prolonged toxicity to fish: LC_{50} – Pimephales promelas (Fathead minnow) 96 h: 0.22 –

0.62 mg/L

LC₅₀ – Oncorhynchus clarki (Cutthroat trout) 96 h: 0.94 µg/L

(mortality)

Acute toxicity to aquatic invertebrates: EC₅₀ – Daphnia magna (Water flea), 96 h: 2.1 mg/L

LC₅₀ – Protozoan phylum (Protozoa), 7 h: 31.6 μg/L

Acute toxicity to aquatic plants: LC_{50} – Algae, phytoplankton, algai mat (Algae), 96 h: 90 µg/L

(mortality)

EC₅₀ – Desmodesmus subspicatus (Green algae), 24 h: 28 mg/L

Acute phytotoxicity, aquatic plants: Biomass reduction – Potamogeton crispus (Curled pond weed), 35h:

23 µg/L

Acute toxicity, miscellaneous aquatic: Chlorophyll Threshold, Aquatic community, 28 d: 2.1 µg/L

12.2 Persistence and degradability

Biodegradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulation potential

Partition coefficient, n-octanol in water: Data not available

Bioaccumulation is not expected

12.4 Mobility in soil

Product is mobile in water.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment is not available as chemical safety assessment was not conducted.

12.6 Other adverse effects

Additional ecological information

This material is a very toxic to aquatic life. Do not allow material to run into surface waters, wastewater or soil.

SECTION XIII - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

The generation of waste should be avoided or minimized whenever possible. This material is subject to disposal regulations under U.S. EPA 40 CFR Parts 261 and 262. Container should be disposed of in a safe way as empty containers may contain product residue. Leave chemicals in original containers. No mixing with other waste. Handle unclean containers like the product itself. Incinerate in an approved facility. Do not incinerate closed container. Dispose of in accordance with the Directive 2008/98/EC as well as other national, federal, state/provincial and local laws and regulations.

No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION XIV - TRANSPORT INFORMATION

US DOT (Domestic Ground Transportation)

Proper Shipping Name: Hypochlorite Solutions

Hazard Class: 8 (As classified by 49 CFR 173 due to destruction over time of steel and aluminum)

Packing Group: III

NAERG: Guide #154

Packaging Authorizations: Non-Bulk: 49 CFR 173.203; Bulk: 49 CFR 173.241

Packaging Exceptions: 49 CFR 173.154

IMO/IMDG (Water Transportation)

Proper Shipping Name: Hypochlorite Solutions

Hazard Class: 8 (As classified by 49 CFR 173 due to destruction over time of steel and aluminum)

UN/NA#: UN1791
Packing Group: III
Marine Pollutant: NO
EMS Number: F-A, S-B

ICAO/IATA (Air Transportation)

Proper Shipping Name: Hypochlorite Solutions

Hazard Class: 8 (As classified by 49 CFR 173 due to destruction over time of steel and aluminum)

UN/NA#: UN1791 Packing Group: III

Quantity Limitations: 49 CFR 175.75 - Cargo Aircraft Only: 60L Passenger Aircraft: 5L

RID/ADR (Rail Transportation)

Proper Shipping Name: Hypochlorite Solutions

Hazard Class: 8 (As classified by 49 CFR 173 due to destruction over time of steel and aluminum)

UN/NA#: UN1791
Packing Group: III

Marine Pollutant: Yes (Refer to Refer to 171.4 and 172.322 for further guidance)

Signal Word: DANGER

Hazard Symbols: GHS05, GHS09 (GHS); C, N (EEC)











SECTION XV - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

U. S. Federal Regulations

OSHA Hazard Communication Standard: This material contains "Hazardous Chemicals" as defined by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA PSM: Not regulated under OSHA Process Safety Management Standard (PSM) 29 CFR 1910.119

EPA RMP: Not regulated under EPA Risk Management Standard (RMP) 40 CFR Part 68

EPA FIFRA: This product is a registered Pesticide under the Federal insecticide, Fungicide and Rodenticide Act (FIFRA) 40 CFR Part 150

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory.

This product not subject to TSCA 12(b) Export Notification.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: This product is subject to the reporting requirements of Section 311/312 of the Emergency Planning and Community Right-to Know Act of 1986.

Acute: Yes Chronic: No Fire: No Reactive: No

SARA 313 Information: None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification: No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains the following CERCLA reportable substances:

Sodium Hypochlorite (CAS # 7681-52-9), RQ – 45.36 kg (100 lbs)

Sodium Hydroxide (CAS # 1310-73-2), RQ – 453.59 kg (1,000 lbs)

*Special Note: The Reportable Quantity (RQ) of Ultra-CHLOR Solution is approximately 100 gallons

Clean Air Act (CAA)

This product does not contain any chemicals that are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depletors.

This product does not contain any Class 2 Ozone depletors.

Clean Water Act (CWA)

Sodium hypochlorite, sodium hydroxide and hypochlorite solutions are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains no chemical(s) known to the state of California to cause cancer or other reproductive harm.

Other U.S. State Inventories:

Sodium hypochlorite (CAS #7681-52-9) is found on the following State Hazardous Substance Inventories and/or Right-to-Know lists: CA, DE, MA, MN, NY, NJ, PA.

Sodium hydroxide (CAS #1310-73-2) is found on the following State Hazardous Substance Inventories and/or Right-to-Know lists: CA, DE, ID, MA, MN, NY, NJ, PA, WA, WI.

Canada

WHMIS Hazard Symbol and Classification:



Class E – Corrosive material – Corrosive to skin

Canadian Controlled Products Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the MSDS contains all the information required by the Controlled Products Regulations.

Canadian Ingredient Disclosure List (IDL): Sodium hypochlorite and sodium hydroxide are listed on the IDL.

Canadian National Pollutant Release Inventory (NPRI): None of the ingredients in this product are listed on the NPRI.

European Economic Community

WGK, Germany (Water danger/protection): 2

Chemical Inventory Lists

| O O | 01, 2100 | |
|----------------------|------------------------------------|--------------------|
| Country | Inventory Name | Inventory Listing* |
| United States | Toxic Substance Control Act (TSCA) | Yes |
| Canada | Domestic Substance List (DSL). | Yes |

| Canada | Non-Domestic Substance List (NDSL) | Yes |
|-------------|--|-----|
| Europe | Inventory of New and Existing Chemicals (EINECS) | Yes |
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| New Zealand | New Zealand Inventory of Chemicals (NZIoC) | Yes |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| Philippines | Philippines Inventory of Chemicals and Chemical Substances (PICCS) | Yes |

^{*&}quot;Yes" indicates that all components of this product are in compliance with the inventory requirements administered by the governing country.

SECTION XVI - OTHER INFORMATION

Hazardous Material Information System (HMIS)

| HEALTH | 2 |
|---------------------|---|
| FLAMMABILITY | 0 |
| REACTIVITY | 1 |
| PERSONAL PROTECTION | Н |

HMIS / NFPA Hazard Rating Legend

* = Chronic Health Hazard 2 = MODERATE 0 = INSIGNIFICANT 3 = HIGH 1 = SLIGHT 4 = EXTREME

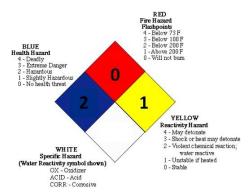








National Fire Protection Association (NFPA)



For additional information, contact our technical service department.

Information contained in this SDS refers only to the specific material designated and does not relate to any process or use involving other materials. This information is based on data believed to be reliable, and the Product is intended to be used in a manner that is customary and reasonably foreseeable. Since actual use and handling are beyond our control, no warranty, express or implied, is made and no liability is assumed by Lions Sales Group LLC in connection with the use of this information.

^{*&}quot;No" indicates that one or more components of this product are not on the inventory and are not exempt from listing.