SAFETY DATA SHEET

M21616 - ANSI - EN

HYPO-ALKALINE BLEACH SOLUTION

SDS No.: M21616 **SDS Revision Date:** 13-Jul-2016

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	Occidental Chemical Corporation 5005 LBJ Freeway P.O. Box 809050 Dallas, TX 75380-9050 1-800-752-5151
24 Hour Emergency Telephone Number:	1-800-733-3665 or 1-972-404-3228 (USA); CANUTEC (Canada): 1-613-996-6666; CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1 703-527-3887; CHEMTREC Contract No: CCN16186
To Request an SDS:	MSDS@oxy.com or 1-972-404-3245
Customer Service:	1-800-752-5151 or 1-972-404-3700
Product Identifier:	**HYPO-ALKALINE BLEACH SOLUTION**
Synonyms:	Chlorine bleach, Soda bleach, Alkaline sodium hypochlorite solution
Product Use:	Bleaching agent, Process cleaner
Uses Advised Against:	This product is NOT a pesticide product. Do not use in pesticide applications
Note:	This product is not registered for pesticide uses in the U.S.

SECTION 2. HAZARDS IDENTIFICATION

HYPO-ALKALINE BLEACH SOLUTION

SDS No.: M21616 **SDS Revision Date:** 13-Jul-2016

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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EMERGENCY OVERVIEW:

Color: Colorless to yellow
Physical State: Liquid
Appearance: Clear
Odor: Characteristic bleach odor

Signal Word: **DANGER**

MAJOR HEALTH HAZARDS: CORROSIVE. CAUSES SERIOUS EYE DAMAGE. CAUSES SEVERE SKIN BURNS. CAUSES DAMAGE TO RESPIRATORY SYSTEM WHEN INHALED. TOXIC IF SWALLOWED. MAY CAUSE DAMAGE TO GASTROINTESTINAL TRACT WHEN SWALLOWED.

PHYSICAL HAZARDS: CORROSIVE TO METALS.

AQUATIC TOXICITY: Toxic to fish and aquatic organisms.

PRECAUTIONARY STATEMENTS: Do not breathe mist, vapors, or spray. Do not taste or swallow. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye, and face protection. Do not eat, drink or smoke when using this product. Keep only in original container. Avoid release to the environment. Store in a secure manner. Store in corrosive resistant container with a resistant inner liner.

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GHS CLASSIFICATION:

GHS: PHYSICAL HAZARDS:	Corrosive to Metals
GHS: CONTACT HAZARD - SKIN:	Category 1C - Causes severe skin burns and eye damage
GHS: CONTACT HAZARD - EYE:	Category 1 - Causes serious eye damage
GHS: TARGET ORGAN TOXICITY (SINGLE EXPOSURE):	Category 1 - Causes damage to: Respiratory System
GHS: CARCINOGENICITY:	Not classified as a carcinogen per GHS criteria. This product is not classified as a carcinogen by NTP, IARC, or OSHA

UNKNOWN ACUTE TOXICITY: Listed below.

Unknown Acute Dermal Toxicity:
100% of this product consists of ingredient(s) of unknown acute dermal toxicity.

Unknown Acute Inhalation Toxicity:
100% of this product consists of ingredient(s) of unknown acute inhalation toxicity.

GHS SYMBOL: Corrosion, Health hazards

HYPO-ALKALINE BLEACH SOLUTION

SDS No.: M21616 **SDS Revision Date:** 13-Jul-2016


GHS SIGNAL WORD: **DANGER**

GHS HAZARD STATEMENTS:

GHS - Physical Hazard Statement(s)
• May be corrosive to metals

GHS - Health Hazard Statement(s)
• Causes severe skin burns and eye damage
• Causes serious eye damage
• Causes damage to organs (Respiratory System)

GHS - Precautionary Statement(s) - Prevention
• Do not breathe mist, vapors, or spray
• Wear protective gloves, protective clothing, eye, and face protection
• Wash thoroughly after handling
• Do not eat, drink or smoke when using this product
• Keep only in original container

GHS - Precautionary Statement(s) - Response
• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
• IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower
• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
• IF INHALED: Remove person to fresh air and keep comfortable for breathing
• Immediately call a POISON CENTER or doctor/physician
• Specific treatment (see First Aid information on product label and/or Section 4 of the SDS)
• Wash contaminated clothing before reuse
• IF exposed: Call a POISON CENTER or doctor/physician
• Absorb spillage to prevent material damage

GHS - Precautionary Statement(s) - Storage
• Store in a secure manner
• Store in corrosive resistant container with a resistant inner liner

GHS - Precautionary Statement(s) - Disposal
• Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

Physical Hazards Not Otherwise Classified
• Contact with acids liberates toxic gas

Health Hazards Not Otherwise Classified
• Contact with acids liberates toxic gas

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Chlorine bleach, Soda bleach, Alkaline sodium hypochlorite solution

Component	Percent [%]	CAS Number
Water	70-76	7732-18-5
Sodium Chloride	11-14.5	7647-14-5
Sodium hypochlorite	12.5-16	7681-52-9
Sodium Hydroxide	0.5-1.5	1310-73-2

SECTION 4. FIRST AID MEASURES

INHALATION: If inhalation of mists, vapors, or spray occurs and adverse effects result, remove to uncontaminated area. Evaluate ABC's (is Airway constricted, is Breathing occurring, and is blood Circulating) and treat symptomatically. GET MEDICAL ATTENTION IMMEDIATELY. There is no specific antidote, treat symptomatically.

SKIN CONTACT: Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry, and shoes immediately. Wash contaminated areas with large amounts of water. GET MEDICAL ATTENTION IMMEDIATELY. Thoroughly clean and dry contaminated clothing before reuse. Discard contaminated leather goods.

EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately contact a physician. Immediate and thorough decontamination of the eye is essential followed by ophthalmological assessment. Follow protocol for corrosive injury.

INGESTION: If swallowed, DO NOT INDUCE VOMITING. Give large amounts of water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. Never give anything by mouth to an unconscious or convulsive person. GET MEDICAL ATTENTION IMMEDIATELY.

Most Important Symptoms/Effects (Acute and Delayed):

Acute Symptoms/Effects: Listed below.
Inhalation (Breathing): Respiratory System Effects: Inhalation exposure may cause irritation, redness of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.
Skin: Skin Corrosion. Skin exposure to gas or liquid may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns.
Eye: Serious Eye Damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye.
Ingestion (Swallowing): Gastrointestinal System Effects: Exposure by ingestion may cause irritation, swelling, and perforation of upper and lower gastrointestinal tissues. Permanent scarring may occur.

Delayed Symptoms/Effects:
- Repeated and prolonged skin contact may cause a dermatitis

Interaction with Other Chemicals Which Enhance Toxicity: Mixing with ammonia, acids, detergents, or organic matter will release chlorinated compounds, which are irritating to eyes, lungs, and mucus membranes.

Medical Conditions Aggravated by Exposure: May aggravate preexisting conditions such as:. Eye disorders that decrease tear production or have reduced integrity. Skin disorders that compromise the integrity of the skin. Respiratory conditions including asthma and other breathing disorders.

Protection of First-Aiders: Protect yourself by avoiding contact with this material. Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Do not ingest. Use personal protective equipment. Refer to Section 8 for specific personal protective equipment recommendations. At minimum, treating personnel should utilize PPE sufficient for prevention of bloodborne pathogen transmission.

Notes to Physician: Treat as a corrosive due to the pH of this material. For prolonged exposures and significant exposures, consider delayed injury to exposed tissues. Probable mucosal damage may contraindicate the use of gastric lavage. There is no specific antidote. Treatment is supportive care. Follow normal parameters for airway, breathing, and circulation.

SECTION 5. FIRE-FIGHTING MEASURES

Fire Hazard: May release toxic gases.

Fire Fighting: Wear an approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Component	Immediately Dangerous to Life/ Health (IDLH)
Sodium Hydroxide 1310-73-2	10 mg/m^3 IDLH

Hazardous Combustion Products: Hydrogen chloride, Chlorine

Sensitivity to Mechanical Impact: Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

Lower Flammability Level (air): Not flammable

Upper Flammability Level (air): Not flammable

Flash point: Not flammable

Auto-ignition Temperature: Not applicable

GHS: PHYSICAL HAZARDS:
- Corrosive to Metals

Physical Hazards Not Otherwise Classified
- Contact with acids liberates toxic gas

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Avoid contact with skin, eyes and clothing. Avoid breathing fumes, vapor, mist, or spray. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS. Vacate poorly ventilated areas as soon as possible, and do not return until odors have dissipated. Evacuation of surrounding area may be necessary for large spills. Stay upwind and keep out of low areas. Consider evacuation of personnel located downwind. Refer to Section 7, Handling and Storage, for additional precautionary measures.

Methods and Materials for Containment and Cleaning Up:
Remove sources of ignition. Stop leak if possible without personal risk. Keep people away from and upwind of spill/leak. Evacuation of surrounding area may be necessary for large spills. Absorb spillage to prevent material damage. Absorb with inorganic absorbents. Liquid material may be removed with a vacuum truck. Shovel dried residue into suitable container. See Section 13, Disposal considerations, for additional information.

Environmental Precautions:
Keep out of water supplies and sewers. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Releases should be reported, if required, to appropriate agencies.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:
Avoid breathing vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Use only with adequate ventilation. Vacate poorly ventilated areas as soon as possible, and do not return until odors have dissipated.

Safe Storage Conditions:
Store and handle in accordance with all current regulations and standards. If possible, store in original container. If not possible, store in a corrosion resistant container with a resistant inner liner and with an adequate relief device. Keep container tightly closed and upright when not in use. Store in a cool, dry area. Store out of direct sunlight. Store in a well-ventilated area. Avoid heat, flames, sparks and other sources of ignition. Do not freeze. Keep separated from incompatible substances (see below or Section 10 of the Safety Data Sheet). Store in a secure manner.

Incompatibilities/ Materials to Avoid:
Material is a strong oxidizing agent and should only be mixed with water. Mixing this product with chemicals (e.g. ammonia compounds, acids, detergents) or organic matter will release chlorinated compounds, which are irritating to eyes, lungs, and mucous membranes, Other materials to avoid include: most metals, peroxides, reducing agents, oxidizing agents

GHS: PHYSICAL HAZARDS:
- Corrosive to Metals

Physical Hazards Not Otherwise Classified
- Contact with acids liberates toxic gas

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): As listed below.

Component	OSHA Final PEL TWA	OSHA Final PEL STEL	OSHA Final PELCeiling
Sodium Chloride 7647-14-5	------	-----	-----
Sodium Hydroxide 1310-73-2	2 mg/m^3	-----	-----

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

NON-REGULATORY EXPOSURE LIMIT(S): As listed below.

Component	ACGIH TWA	ACGIH STEL	ACGIH Ceiling	OSHA TWA (Vacated)	OSHA STEL (Vacated)	OSHA Ceiling (Vacated)
Sodium Hydroxide	-----	-----	2 mg/m^3	-----	-----	2 mg/m^3

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

Component	OXY REL 8 hr TWA	OXY REL STEL	OXY REL Ceiling
Sodium hypochlorite 7681-52-9 (12.5-16)		2 mg/m^3	-----

ENGINEERING CONTROLS: Use closed systems when possible. Provide local exhaust ventilation where vapor or mist may be generated. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear splash resistant safety goggles with a face-shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Contaminated clothing should be removed, then discarded or laundered.

Hand Protection: Wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove.

Protective Material Types:
Natural rubber, Neoprene, Nitrile, Polyvinyl chloride (PVC)

Respiratory Protection: A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when

symptoms have been observed that are indicative of overexposure. Acid gas cartridges may be required if decomposition products are present. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

Component	Immediately Dangerous to Life/ Health (IDLH)
Sodium Hydroxide 1310-73-2	10 mg/m^3 IDLH

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Appearance: Clear
Color: Colorless to yellow
Odor: Characteristic bleach odor
Odor Threshold [ppm]: 0.3 ppm (0.9 mg/m^3).
Decomposition Temperature: 230 °F (110 °C)
Boiling Point/Range: 230 °F (110 °C)
Freezing Point/Range: -3 to -14 °F (-19.4 to -25.6 °C).
Melting Point/Range: Not applicable to liquids
Vapor Pressure: No data available
Vapor Density (air=1): No data available
Relative Density/Specific Gravity (water=1): 1.22
Density: 9.9 - 10.5 lb/gal
Water Solubility: 100%
pH: 12
Volatility: No data available
Evaporation Rate (ether=1): No data available
Partition Coefficient (n-octanol/water): No data available
Flash point: Not flammable
Flammability (solid, gas): Not applicable
Lower Flammability Level (air): Not flammable
Upper Flammability Level (air): Not flammable
Auto-ignition Temperature: Not applicable
Viscosity: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: May decompose upon heating and exposure to sunlight.

Chemical Stability: Stable at normal temperatures and pressures.

Possibility of Hazardous Reactions: No data available.

Conditions to Avoid: Avoid heat, flames, sparks and other sources of ignition. Direct sunlight.

Incompatibilities/ Materials to Avoid: Material is a strong oxidizing agent and should only be mixed with water. Mixing this product with chemicals (e.g. ammonia compounds, acids, detergents) or organic matter will release chlorinated compounds, which are irritating to eyes, lungs, and mucous membranes, Other materials to avoid include: most metals, peroxides, reducing agents, oxidizing agents

Hazardous Decomposition Products: hydrogen chloride, Chlorine, oxygen

Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

PRODUCT TOXICITY DATA: HYPO-ALKALINE BLEACH SOLUTION

LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
8910 mg/kg (Rat)	No data available	No data available

COMPONENT TOXICITY DATA:

Note: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

Component	LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
Sodium Chloride 7647-14-5	3000 mg/kg (Rat)	10 g/kg (Rabbit)	42 g/m^3 (1 hr-Rat)
Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	10000 mg/kg (Rabbit)	Not listed
Sodium Hydroxide 1310-73-2	140-3400 mg/kg	1350 mg/kg (Rabbit)	Not listed

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POTENTIAL HEALTH EFFECTS:

Eye contact: Causes serious eye damage. Eye exposures may cause burns to the eye lids, conjunctivitis, corneal edema, and corneal burn.

Skin contact: Skin contact may be irritating and corrosive. Can cause skin burns.

Inhalation: Inhalation may cause coughing, choking, irritation (possibly severe), chemical burns, shortness of breath, and pulmonary edema. Pulmonary edema may develop several hours after a severe acute exposure.

Ingestion: Not a likely route of exposure in occupational settings. If swallowed, may cause irritation, swelling, pain, and perforation of upper and lower gastrointestinal tissues. Permanent scarring may occur.

Chronic Effects: Repeated or prolonged skin contact may result in dermatitis.

SIGNS AND SYMPTOMS OF EXPOSURE:
Listed below.

Inhalation (Breathing): Respiratory System Effects: Inhalation exposure may cause irritation, redness of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.
Skin: Skin Corrosion. Skin exposure to gas or liquid may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns.
Eye: Serious Eye Damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye.
Ingestion (Swallowing): Gastrointestinal System Effects: Exposure by ingestion may cause irritation, swelling, and perforation of upper and lower gastrointestinal tissues. Permanent scarring may occur.

TOXICITY:
Carefully controlled sensitization studies on animal have not resulted in any reproducible positive findings. Standard sensitization patch tests in healthy human volunteers show no potential to induce contact sensitization. In tests using rats and mice, there was no evidence of carcinogenicity.

Interaction with Other Chemicals Which Enhance Toxicity: Mixing with ammonia, acids, detergents, or organic matter will release chlorinated compounds, which are irritating to eyes, lungs, and mucus membranes.

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GHS HEALTH HAZARDS:
Listed below.

GHS: ACUTE TOXICITY - ORAL: Category 5 - May be harmful if swallowed.

GHS: CONTACT HAZARD - EYE: Category 1 - Causes serious eye damage

GHS: CONTACT HAZARD - SKIN: Category 1C - Causes severe skin burns and eye damage.

Skin Absorbent / Dermal Route? No.

GHS: CARCINOGENICITY:
Not classified as a carcinogen per GHS criteria. This product is not classified as a carcinogen by NTP, IARC, or OSHA.

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure):
Category 1 - Respiratory system

MUTAGENIC DATA:
Not classified as a mutagen per GHS criteria. Sodium hypochlorite has tested positive in in vitro test systems and negative in in vivo test systems. These results are consistent with other germicides.

Health Hazards Not Otherwise Classified

• Contact with acids liberates toxic gas

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

Component	Freshwater Fish	Invertebrate Toxicity:	Algae Toxicity:	Other Toxicity:
Sodium hypochlorite	- - 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 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)	- - 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	- - 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	- No data available
Sodium Chloride	- LC50, fathead minnow (Pimephales promelas): 10,610 mg/l	- LC50, water flea Daphnia magna: 4,571 mg/l	- IC50, OECD 209 Test; activated sludge, respiration inhibition: > 1,000 mg/l	- IC50, OECD 209 Test; activated sludge, respiration inhibition: > 1,000 mg/l

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 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)

Aquatic Toxicity:
Data provided are for sodium hypochlorite.

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

FATE AND TRANSPORT:

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.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from material:
Reuse or reprocess, if possible. May be subject to disposal regulations. Dispose of in accordance with federal, state and local regulations.

Container Management:
See product label for container disposal information. Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container rinsate must be disposed of in compliance with applicable regulations.

SECTION 14. TRANSPORT INFORMATION

LAND TRANSPORT

U.S. DOT 49 CFR 172.101:
UN NUMBER: UN1791
PROPER SHIPPING NAME: Hypochlorite solutions (SODIUM HYPOCHLORITE)
HAZARD CLASS/ DIVISION: 8
PACKING GROUP: III
LABELING REQUIREMENTS: 8

MARINE POLLUTANT: Marine Pollutant (Sodium Hypochlorite)

RQ (lbs): RQ 100 Lbs. (Sodium hypochlorite)

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:
UN NUMBER: UN1791
SHIPPING NAME: Hypochlorite Solution (Sodium Hypochlorite)
CLASS OR DIVISION: 8
PACKING/RISK GROUP: III
LABELING REQUIREMENTS: 8
CAN. MARINE POLLUTANT: Marine Pollutant (Sodium Hypochlorite)

MARITIME TRANSPORT (IMO / IMDG) :

UN NUMBER: UN1791
PROPER SHIPPING NAME: Hypochlorite solutions (SODIUM HYPOCHLORITE)
HAZARD CLASS / DIVISION: 8
Packing Group: III
LABELING REQUIREMENTS: 8
MARINE POLLUTANT: Marine Pollutant (Sodium Hypochlorite)

SECTION 15. REGULATORY INFORMATION

U.S. REGULATIONS

OSHA REGULATORY STATUS:
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):
If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Component	CERCLA Reportable Quantities:
Sodium hypochlorite	100 lb (final RQ)
Sodium Hydroxide	1000 lb (final RQ)

SARA EHS Chemical (40 CFR 355.30)

Not regulated

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):
Acute Health Hazard

EPCRA SECTION 313 (40 CFR 372.65):
Not regulated

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):
Not regulated

FIFRA REGULATIONS: Not applicable. This product is not an EPA registered pesticide

FIFRA LABELING REQUIREMENTS: - Not applicable. This product is not an EPA registered pesticide

FDA: This product is not produced under all current Good Manufacturing Practices (cGMP) requirements as defined by the Food and Drug Administration (FDA).

NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt.

TSCA 12(b): This product is not subject to export notification.

Canadian Chemical Inventory: All components of this product are listed on either the DSL or the NDSL.

Component	DSL	NDSL
Sodium hypochlorite 7681-52-9	Listed	Not Listed
Sodium Chloride 7647-14-5	Listed	Not Listed
Sodium Hydroxide 1310-73-2	Listed	Not Listed

STATE REGULATIONS

Component	California Proposition 65 Cancer WARNING:	California Proposition 65 CRT List - Male reproductive toxin:	California Proposition 65 CRT List - Female reproductive toxin:	Massachusetts Right to Know Hazardous Substance List	New Jersey Right to Know Hazardous Substance List	New Jersey Special Health Hazards Substance List
Sodium hypochlorite 7681-52-9	Not Listed	Not Listed	Not Listed	Listed	1707	Not Listed
Sodium Chloride 7647-14-5	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Sodium Hydroxide 1310-73-2	Not Listed	Not Listed	Not Listed	Listed	1706	corrosive

Component	New Jersey - Environmental Hazardous Substance List	Pennsylvania Right to Know Hazardous Substance List	Pennsylvania Right to Know Special Hazardous Substances	Pennsylvania Right to Know Environmental Hazard List	Rhode Island Right to Know Hazardous Substance List

Sodium hypochlorite 7681-52-9	Not Listed	Listed	Not Listed	Present	Not Listed
Sodium Chloride 7647-14-5	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Sodium Hydroxide 1310-73-2	Not Listed	Listed	Not Listed	Present	Listed

CANADIAN REGULATIONS

• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

Component	Canadian Chemical Inventory:	NDSL:	WHMIS - Classifications of Substances:
Sodium hypochlorite	Listed		E
Sodium Chloride	Listed		Uncontrolled product according to WHMIS classification criteria
Sodium Hydroxide	Listed		E

WHMIS Hazard Class:

• E Corrosive material

SECTION 16. OTHER INFORMATION

Prepared by: OxyChem Corporate HESS - Product Stewardship

Rev. Date: 13-Jul-2016

Reason for Revision:

• Updated Transportation Information: SEE SECTION 14
• Updated First Aid Measures: SEE SECTION 4
• Format change to sections: 2, 5, 8, 11, 12, 15, and 16

IMPORTANT:

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HYPO-ALKALINE BLEACH SOLUTION

SDS No.: M21616 **SDS Revision Date:** 13-Jul-2016

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End of Safety Data Sheet