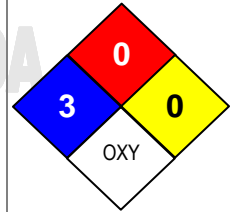




Industrias AIEn
Research & Development
Safety Data Sheet





SAP Code

SDS FP-6050002

SECTION 1 – IDENTIFICATION

Manufacturer ALEN DEL NORTE S.A. DE C.V.	Mexico emergency telephone 01 800 834 33 00	Fax +52 (81) 81221099
Address Blvd. Díaz Ordaz No. 1000, Los Treviño, Santa Catarina, N.L. C.P. 66150, México	Emergency telephone number (US) CHEMTRAC For domestic shipments 800 424 9300 For shipments outside US 703 527 3887	
Product Name CLOALEN REGULAR BLEACH		
Chemical Name Sodium hypochlorite solution	CAS Number 7681-52-9	
Synonyms/Trade Names Carrel-Drakin solution		
Application Household Bleach	Restrictions on use This product is not intended for industrial uses or as a sanitizing agent.	

SECTION 2 – HAZARDS IDENTIFICATION

Classification: Skin Corrosion Cat. 1B Eye Damage Cat. 1 Aquatic Acute Toxicity Cat. 1 This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).
Signal word: Danger
Hazard Statements: H314 Causes severe skin burns and eye damage. H400 Very toxic to aquatic life.
Pictograms:  

Precautionary Statements	
<p>❖ Prevention: Use with adequate ventilation. Avoid contact with skin, eyes and clothing. Wear protective gloves, protective clothing, face and eye protection. Wash hands thoroughly after handling. Do not breathe vapors. Avoid release to the environment.</p>	<p>❖ Storage: Store locked up. Keep out of reach of children. Keep containers closed when not in use. Store in a cool, dry area. Keep from freezing.</p>
<p>❖ Response: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. If wearing contact lenses, remove after 5 minutes and continue rinsing for 10-15 minutes. IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. IF SWALLOWED: Get prompt medical attention. Give a glassful of water. Do not induce vomiting. IF INHALED: Remove to fresh air. If not breathing, give artificial respiration.</p>	<p>❖ Disposal: Dispose in accordance with all applicable local, state and federal regulations.</p>
<p>Hazard not otherwise classified: Contact with acids liberates toxic gas. Repeated or prolonged contact may cause skin sensitization.</p>	<p>Unknown Toxicity: Not applicable, very toxic to aquatic life.</p>

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients Chemical/Common Name	Composition Range	CAS Number
Hypochlorous acid sodium salt / Sodium hypochlorite	4.0 – 6.0	7681-52-9
Sodium hydroxide / Caustic soda	0.05 – 0.10	1310-73-2

SECTION 4 – FIRST-AID MEASURES

For treatment advice, call a Poison Control Center or a doctor.

Ingestion	<ul style="list-style-type: none"> ▪ If only small amounts have been ingested give a glass of water or milk to drink. ▪ For large ingestions consider nasogastric aspiration of the stomach contents. ▪ Apply other supportive measures as indicated by the patient's clinical condition. ▪ Get immediate medical attention.
Inhalation	<ul style="list-style-type: none"> ▪ Remove patient from exposure. ▪ Ensure a clear airway and adequate ventilation. ▪ Give oxygen to symptomatic patients. ▪ Apply other supportive measures as indicated by the patient's clinical condition. ▪ Get medical attention.
Skin	<ul style="list-style-type: none"> ▪ Remove patient from exposure. ▪ Remove all soiled clothing. ▪ Wash the skin with tepid water until it no longer feels soapy. ▪ Apply a soothing cream if there is any residual skin irritation.
Eyes	<ul style="list-style-type: none"> ▪ Remove patient from exposure. ▪ Remove contact lenses if necessary and immediately irrigate the affected eye thoroughly with water or 0.9% saline for at least 10-15 minutes. ▪ Patients with corneal damage or those whose symptoms do not resolve rapidly should seek medical advice. ▪ Get medical attention.
<p>Most important symptoms and effects: Burning of eyes and/or skin</p>	<p>Indication of any immediate medical attention and special treatment needed: Treat symptomatically. Can cause corneal burns. Probable mucosal damage may contraindicate the use of gastric lavage.</p>

SECTION 5 – FIRE-FIGHTING MEASURES

Flash Point (°C)	Test method
NA	NA
Flammability	Explosive limits in air
Not flammable	No explosion hazard.
Extinguishing media:	
Water spray <input checked="" type="checkbox"/>	CO ₂ <input checked="" type="checkbox"/> Foam <input checked="" type="checkbox"/> Other <input type="checkbox"/>
Unusual fire and explosion hazards	
NA	
Special protective equipment	
Full breathing apparatus and fire-fighting equipment. Neoprene gloves, goggles, boots.	
Special firefighting procedures	
NA	
Conditions to avoid	
Avoid contact with acids, ammonia. Acts as oxidizer with combustible material.	
Hazardous combustion products	
Carbon dioxide and carbon monoxide; chlorine gas may be released	

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Protective equipment:	
Gloves <input checked="" type="checkbox"/> Neoprene	Goggles <input checked="" type="checkbox"/> Boots <input checked="" type="checkbox"/> Coat <input checked="" type="checkbox"/> Resistant Other <input checked="" type="checkbox"/> Liquid-tight chemical protective clothing in combination with self-contained open circuit positive pressure compressed air breathing apparatus
Emergency Procedures in case of release or spillage:	
Large spills: Wear protective equipment, remove sources of ignition, sweep up the material, use absorbent material like sand or saw dust, collect in closed containers, wash area with water because the surface may be slippery.	
Small spills: Wash area with plenty of water and dispose the material in accordance with all local, state and federal regulations. Avoid contact with acids, ammonia. Avoid contact with skin, eyes and clothing.	
Environmental precautions: Do not allow product to enter lakes, rivers or streams. The product is toxic to fish and aquatic invertebrates.	
Methods and Materials for Containment and Cleaning up:	
Use absorbent material and collect in closed containers, wash with plenty water, and conduct to sanitary treatment facility	

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling: Use with adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid contact with acids, ammonia or metals. Do not eat, drink, or smoke when using the product.

Recommendations on the conditions for safe storage: Store locked up. Keep out of reach of children. Keep containers closed when not in use. Store in a cool, dry area. Keep from freezing.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

Hazardous Ingredients Chemical/Common Name	CAS Number	ACGIH TLV	OSHA PEL/NIOSH REL
Hypochlorous acid sodium salt / Sodium hypochlorite	7681-52-9	TLV: Not estab.	ND
Sodium hydroxide / Caustic soda	1310-73-2	TLV-ceiling: 2 mg/m ³	PEL-TWA: 2 mg/m ³ REL-ceiling: 2 mg/m ³

Appropriate engineering controls:

Eye-washers

Ventilation requirements

General ventilation Local ventilation Unnecessary in normal cond.

Work practices: Handle according to good industrial hygiene and safety practices.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid		
Color and odor:	Light yellow and characteristic chlorine odor		
Boiling point (°C):	ND	Melting or freezing point:	NA
Flash point (°C):	NA	Decomposition temperature:	ND
Fire point (°C):	NA	Auto ignition temperature (°C):	NA
Density (g/ml):	1.075 – 1.104	Vapor density:	ND
Molecular weight:	74.45	Volatility:	NA
Percent volatile 100°C:	ND	Vapor pressure (mmHg @ 20°C):	ND
Lower explosion limit (%):	NA	Upper explosion limit (%):	NA
pH:	12.1 – 13.8	Viscosity (cPs):	NA
Solubility in water:	Complete	Solubility in others:	ND
Partition coefficient: n-octanol / water	ND	Odor threshold:	ND

SECTION 10 – STABILITY AND REACTIVITY

Reactivity:

Reacts in contact with acidic products, ammonia or vinegar and may release chlorine gas.

Chemical stability:

Stable Unstable
Under recommended storage conditions

Possibility of hazardous reactions:

It may react exothermically in contact with acids to generate chlorine gas.

Conditions to avoid:

It may become unstable at high temperatures (above 45°C).

Incompatible materials:

None Water Acids Alkalis Oxide Other
known
Fe, Cu, Ni, Bronze
Metals, ammonia, urea

Hazardous decomposition products:

Chlorine gas. When heated to decomposition it emits toxic fumes of Na₂O and hydrogen chloride.

Hazardous polymerization:

Will not occur May occur

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

Contact via	Acute	Chronic
Ingestion	May cause mild to moderate irritation to intestinal mucous. <u>Ingestion of small amounts</u> (up to 200ml in adults; up to 50ml in children) may cause burns to the mouth, throat and stomach. <u>Ingestion of large amounts</u> (about 300ml in adults or 100ml in children) may cause corrosive esophagitis, abdominal pain, diarrhea and, in some cases, metabolic acidosis.	May cause severe burns.
Inhalation	Irritation of eyes and nose with sore throat, cough, chest tightness, head-ache, ataxia and confusion. Dyspnoea and stridor due to laryngeal oedema may follow. Pulmonary oedema with increasing breathlessness, wheeze, hypoxia and cyanosis may take up to 36 hours to develop.	NA
Skin	May cause irritation or cause burning pain.	May cause severe burns.
Eyes	May cause, irritation, pain, blepharospasm, lacrimation, conjunctivitis, palpebral oedema and photophobia.	May cause severe eye damage, like corneal burns.

Symptoms:

Burning of eyes and/or skin, sore throat, cough or esophagitis.

Chronic effects from short and long-term exposure:

Carcinogenic Mutagenic Theratogenic Included in Included in
 NOM 010 other references
 STPS

National Toxicology Program (NTP) Report on Carcinogens: Not listed.

International Agency for Research on Cancer (IARC) Monographs: Group 3 – Not classifiable as to Carcinogenicity to Humans.

OSHA: Not listed.

Complementary information

Chemical Name	LD50 Oral	Animal Species
Sodium hypochlorite	5,800 mg/kg	Mouse

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Very toxic to aquatic life. Toxic to fish, shrimp, oysters and other aquatic invertebrates. Do not allow product to enter lakes, rivers or streams.

Persistence and degradation in environment: Information not available.

Test of bioaccumulation: Information not available.

Other adverse effects: Information not available.

SECTION 13 – DISPOSAL CONSIDERATIONS**Waste disposal methods:**

Dispose in accordance with all applicable local, state and federal regulations.

Contaminated packaging: Do not reuse empty containers.

SECTION 14 – TRANSPORT INFORMATION

Regulation	Proper Shipping Name	Identification number UN/NA	Hazard Classification	Packing Group
Land Transportation DOT (USA)	Hypochlorite solutions	UN1791	Class 8	III*
Land Transportation TDG (Canada)	Hypochlorite solutions	UN1791	Class 8	III
Land Transportation ADR (Europe)	Hypochlorite solutions	UN1791	Class 8	III
Air Transportation IATA (International)	Hypochlorite solutions	UN1791	Class 8	III
Water Transportation IMDG (Chapter 2.9 IMDG code) (International)	Hypochlorite solutions Marine pollutant	UN1791	Class 8	III**

* **Limited Quantity:** As provided in 49CFR 173.154, this product is excepted from packaging and labeling requirements when transported by land in single packaging with net quantities of 5.0 L (1.3 gallons) or less.

** As provided in 49CFR 172.322, there no additional packaging or marking requirements for single packaging with net quantities of 5.0 L (1.3 gallons) or less.

SECTION 15 – REGULATORY INFORMATION

RCRA (40 CFR 261, Subpart D):	New Jersey Right to Know Hazardous Substance List:
If this product becomes a waste, it meets the criteria of a hazardous waste and would have the following EPA hazardous waste number: D002. As a hazardous liquid waste, it must be disposed of in accordance with local state and federal regulations in a permitted hazardous waste treatment facility	This product contains the following components subject to reporting requirements: sodium hypochlorite and sodium hydroxide.
Clean Water Act:	Pennsylvania Hazardous Substance List:
Contains sodium hypochlorite (RQ = 100 lb/45.4 kg) and sodium hydroxide (RQ = 1000 lb/454 kg) which are regulated under Sections 301, 307 and 311.	This product contains the following components subject to reporting requirements: sodium hypochlorite and sodium hydroxide.
Clean Air Act:	Massachusetts Substance List:
Not applicable.	This product contains the following components subject to reporting requirements: sodium hypochlorite and sodium hydroxide.
SARA Sections 301-304 (Threshold Planning Quantity - TPQ) 40 CFR 355:	State Of Illinois Substance List:
Not applicable.	This product contains the following components subject to reporting requirements: sodium hypochlorite and sodium hydroxide.
Section 313 (Toxic Chemical Release Reporting) 40 CFR 372:	Michigan Critical Materials Register:
The following chemicals must be reported under SARA 313: Sodium hypochlorite.	Not applicable.
CERCLA Section 102 (Reportable Quantity - RQ):	Canada (WHMIS) - listed material:
Not applicable.	This product contains the following components subject to reporting requirements: sodium hypochlorite and sodium hydroxide.
California Proposition 65 Carcinogens and reproductive toxins:	TSCA Section 8(b) Inventory Status:
Not applicable.	All ingredients listed in this product are listed in the TSCA Inventory or are not required to be listed in the TSCA Inventory.

SECTION 16 – OTHER INFORMATION

HMIS Classification (USA)		HMIS Letter	Required Equipment
Health	3	A	Safety glasses.
Flammability	0	B	Safety glasses, gloves.
Physical Hazard	0	C	Safety glasses, gloves, protective apron.
Personal Protection	B	D	Face shield, gloves, protective apron.
		E	Safety glasses, gloves, dust respirator.

NFPA Aerosol Level:		F	Safety glasses, gloves, protective apron, dust respirator.
NA		G	Safety glasses, gloves, vapor respirator.
NA: Not Applicable TLV: Threshold Limit Values ND: Not Determined		H	Splash glasses, gloves, protective apron, vapor respirator.
		I	Safety glasses, gloves, dust respirator, vapor respirator.
		J	Safety glasses, gloves, protective apron, dust respirator, vapor respirator.
		K	Air line mask or hood, gloves, full suit, boots.

Creation date:	Last revision date:	Next revision date:	Created by:
03/Jan/2008	20/Abr/2015	20/Abr/2017	Gerardo Urbina Pacheco

DISCLAIMER

The submission of this MSDS may be required by law, but this is not an assertion that the substance is not hazardous when it is not used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health. The information contained herein has been compiled from sources considered by Industrias AIE to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific material designated herein, and does not relate to the use in combination with any other material or any other process. Industrias AIE assumed no responsibility for injury to the recipient or third persons, for any damage to any property from misuse of the controlled product.