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SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Industrial Use Sodium Hypochlorite Solution**

Other means of identification : 1225001

Recommended use of the chemical and restrictions on use

: **For Industrial Use Only. Not to be used or sold for FIFRA/Pesticide Uses.**

Restrictions on use None known.

Chemical family : Alkali metal hypochlorites

Name, address, and telephone number of the supplier:

JCI Jones Chemicals Inc.
1765 Ringling Boulevard
Sarasota, FL, USA
34236
Supplier's Telephone # : 1-800-477-1078

Name, address, and telephone number of the manufacturer:

Refer to supplier

24 Hr. Emergency Tel # : CHEMTREC (USA): 1-800-424-9300
CHEMTREC (CANADA): 1-800-567-7455

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) and Canadian WHMIS regulations (Hazardous Products Regulations).

Hazard classification:
Corrosive to metals - Category 1
Skin Corrosion/Irritation - Category 1
Serious eye damage/eye irritation - Category 1

Label elements

Hazard pictogram(s)

Signal Word

Danger

Hazard statement(s)

May be corrosive to metals.
Causes severe skin burns and eye damage.

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Precautionary statement(s)

Do not breathe mist.
Wear protective gloves,clothing and eye,face protection.
Wash hands and face thoroughly after handling.
Keep only in original packaging.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE or doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Absorb spillage to prevent material-damage.
Store in corrosion resistant container with a resistant inner liner.
Store locked up.

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

Other hazards

Contact with acids liberates toxic chlorine gas.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Solution

Chemical name	Common name and synonyms	CAS #	Concentration (% by weight)
Sodium Hydroxide	Caustic soda Lye Soda Lye	1310-73-2	**0.1 - 2.0**
Sodium hypochlorite	Hypochlorous acid, sodium salt Sodium oxychloride Bleach	7681-52-9	**12.5 - 15.6**

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Ingestion : IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell. Immediately call a POISON CENTER or doctor.

Inhalation : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.

Skin contact : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.

Eye contact : Immediately call a POISON CENTER or doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Most important symptoms and effects, both acute and delayed

: Ingestion may cause severe burns to the mucous membranes of the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations and bleeding. Causes serious eye damage. Symptoms may include severe pain, blurred vision, redness and corrosive damage. Chemical burns, corneal damage, and possibly blindness can result from direct contact. Causes skin burns. Symptoms may include redness, blistering, pain and swelling. Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring. May cause irritation of the nose, throat, mucous membranes, and respiratory tract.

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Indication of any immediate medical attention and special treatment needed

: Immediate medical attention is required. Treat symptomatically. Causes chemical burns.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

: Water fog, alcohol foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

: Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

: Burning may produce irritating, toxic and obnoxious fumes. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Contact with metals may release small amounts of flammable hydrogen gas.

Flammability classification (OSHA 29 CFR 1910.106)

: Not flammable.

Hazardous combustion products

: May include and are not limited to: Sodium oxides. Chlorate

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

: Do not enter without wearing specialized protective equipment suitable for the situation. Firefighter's normal protective clothing (Bunker Gear) will not provide adequate protection. A full-body encapsulating chemical protective suit with positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) may be necessary. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Special fire-fighting procedures

: Do not breathe mists, vapours or sprays. Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Do not touch or walk through spilled material. Ensure clean-up is conducted by trained personnel only.All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.

Methods and material for containment and cleaning up

: Ventilate the area. Remove all sources of ignition.Prevent further leakage or spillage if safe to do so.Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand). Place in clean, dry and labeled containers. Refer to Section 13 for disposal of contaminated material. Contact the proper local authorities.

Special spill response procedures

: If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the National Response Center in the United States (phone: 1-800-424-8802).

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SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Wear protective gloves,clothing and eye,face protection. Use only in well-ventilated areas. Keep away from extreme heat and flame. Do not breathe mists, vapours or sprays. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Keep only in original container. Keep away from incompatibles. Keep containers closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Conditions for safe storage : Store in corrosion resistant container with a resistant inner liner. Store locked up. Store away from incompatible materials. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. No smoking. Inspect periodically for damage or leaks. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area.

Incompatible materials : Incompatible with strong acids and oxidizing agents. Tin Aluminium Phosphorus compounds Organic materials

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

Chemical Name	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
Sodium Hydroxide	2 mg/m³ (Ceiling)	Not available	2 mg/m³	Not available.
Sodium hypochlorite	Not available	2 mg/m³ (AIHA WEEL)	Not available.	Not available.

Exposure controls

Ventilation and engineering measures

: Use only in well-ventilated areas. Use corrosion-resistant ventilation. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection : If airbourne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02. Advice should be sought from respiratory protection specialists.

Skin protection : Wear protective gloves/clothing.Impervious gloves must be worn when using this product. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Wear impervious clothing to prevent skin contact. Wear chemically protective gloves (impervious), boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.

Eye / face protection : Wear eye and face protection. Chemical splash goggles must be worn when handling this material. A full face shield may also be necessary.

Other protective equipment : Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations

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: Do not breathe mists, vapours or sprays. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash hands thoroughly after using this product, and before eating, drinking or smoking. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Liquid.
Colour : Not available.
Odour : Pungent.
Odour threshold : 0.9 mg/m³
pH : 12 - 14 (25 °C/77 °F)
Melting Point/Freezing point : -11 °F (-24 °C) (12.5% solution)
Initial boiling point and boiling range
: Not available.
Flash point : Not available.
Flashpoint (Method) : Not applicable.
Evaporation rate (BuAe = 1) : Not applicable.
Flammability : Not applicable.
Lower explosion or flammability limit (% by vol.)
: Not applicable.
Upper explosion or flammability limit (% by vol.)
: Not applicable.
Oxidizing properties : None.
Explosive properties : Not explosive
Vapour pressure : 12 mm Hg (20°C/68°F)
Relative vapour density : Not available.
Relative density / Specific gravity
: Not available.
Solubility in water : Completely miscible with water.
Other solubility(ies) : Not available.
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution
: Not applicable.
Auto-ignition temperature : Not applicable.
Decomposition temperature : Not available.
Viscosity : Not available.
Particle characteristics : Not applicable.
Volatiles (% by weight) : Not available.
Volatile organic Compounds (VOC's)
: Not available.
Absolute pressure of container
: Not applicable.
Flame projection length : Not applicable.
Other physical/chemical comments
: No additional information.

SECTION 10. STABILITY AND REACTIVITY

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

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Possibility of hazardous reactions
: Hazardous polymerization does not occur. No dangerous reaction known under conditions of normal use.

Conditions to avoid : Avoid direct sunlight and extremely high or low temperatures. Do not use in areas without adequate ventilation. Reacts violently with strong acids. Avoid contact with incompatible materials. Corrosive to aluminum, tin, zinc, copper and most alloys in which they are present including brass and bronze. Corrosive to steels at elevated temperatures above 40°C (104°F). Do not mix with ammonia or other cleaners, as dangerous vapours may be created.

Incompatible materials : Strong acids and oxidizing agents Phosphorus compounds Tin Zinc. Aluminum

Hazardous decomposition products
: May include and are not limited to: Sodium oxides. Chlorate

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES

Routes of entry skin & eye : YES

Routes of entry Ingestion : YES

Routes of exposure skin absorption
: YES

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation
: Inhalation of mists or sprays may mildly irritate the upper respiratory tract and cause coughing or sneezing.

Sign and symptoms ingestion
: Ingestion may cause severe burns to the mucous membranes of the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations and bleeding.

Sign and symptoms skin : Causes skin burns. Symptoms may include redness, blistering, pain and swelling. Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring.

Sign and symptoms eyes : Causes serious eye damage. Symptoms may include severe pain, blurred vision, redness and corrosive damage. Chemical burns, corneal damage, and possibly blindness can result from direct contact.

Potential Chronic Health Effects
: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Mutagenicity : Not expected to be mutagenic in humans.

Carcinogenicity : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity
: Not expected to cause reproductive effects.

Sensitization to material : Not expected to be a skin or respiratory sensitizer.

Specific target organ effects : Target Organs: Eyes, skin, respiratory system and digestive system.

Medical conditions aggravated by overexposure
: Pre-existing skin, eye and respiratory disorders.

Synergistic materials : No information available.

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Toxicological data : Due to sodium hydroxide's mechanism of action-primarily causing severe, localized corrosive tissue damage-a single LC50/LD50 value is insufficient to accurately characterize its full hazard profile. The severity of harm is highly dependent on the concentration and duration of contact, emphasizing its primary risk as a corrosive agent rather than a systemic toxicant.

Sodium hydroxide causes immediate and severe local damage to any tissue it contacts (skin, eyes, or the lining of the mouth, throat, and gastrointestinal tract if ingested). This damage is a chemical burn that can lead to permanent tissue degeneration and even death through mechanisms like perforation of the gastrointestinal tract, not by reaching a lethal concentration in the bloodstream.

Chemical name	LC_{50}(4hr) inh, rat	LD_{50} (Oral, rat)	LD_{50} (Rabbit, dermal)
Sodium Hydroxide	Not available	Not available	Not available.
Sodium hypochlorite	>10.5 mg/L 1 hr (ECHA)	5230 mg/kg (12.5%) (ECHA)	>20000 mg/kg (12.5%) (ECHA)

Other important toxicological hazards : None reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. See the following tables for the substance's ecotoxicity data.

Ecotoxicity data:

Ingredients	CAS #	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Sodium Hydroxide	1310-73-2	125 mg/L (Mosquito fish)	Not available	None.
Sodium hypochlorite	7681-52-9	0.58 mg/L (Bluegill sunfish) (14.6%)	Not available	1

Ingredients	CAS #	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Sodium Hydroxide	1310-73-2	40.4 mg/L (Daphnia magna)	Not available.	None.
Sodium hypochlorite	7681-52-9	0.141 mg/L (Daphnia magna)	Not available	1

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Ingredients	CAS #	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Sodium Hydroxide	1310-73-2	Not available	Not available.	None.
Sodium hypochlorite	7681-52-9	0.036 mg/L/72hr (Green algae) (13.7%)	0.005 mg/L/72hr (13.7%)	10

Persistence and degradability
: There is no data available for this product.

Bioaccumulation potential : There is no data available for this product.

Components	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Sodium Hydroxide (CAS 1310-73-2)	Not available	Not available
Sodium hypochlorite (CAS 7681-52-9)	Not available.	Not available.

Mobility in soil : There is no data available for this product.

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

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal : Handle in accordance with good industrial hygiene and safety practice. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Refer to protective measures listed in sections 7 and 8.

Methods of Disposal : Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA : It is the responsibility of the waste generator to determine the proper waste identification and disposal method.

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SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	UN1791	Hypochlorite solutions	8	III	
49CFR/DOT Additional information	Refer to 49 CFR/DOT regulations for further information.				
ICAO/IATA	UN1791	Hypochlorite solution	8	III	
ICAO/IATA Additional information	Refer to IATA regulations for further information.				
IMDG	UN1791	HYPOCHLORITE SOLUTION	8	III	
IMDG Additional information	Refer to the IMDG regulations for further information.				

Special precautions for user : Appropriate advice on safety must accompany the package.
Environmental hazards : Marine pollutant

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

Ingredients	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de Minimis Concentration
Sodium Hydroxide	1310-73-2	Yes	1000 lb/ 454 kg	Not applicable.	No	1%
Sodium hypochlorite	7681-52-9	Yes	100 lb/ 45.4 kg	None.	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:Corrosive to metals;Skin corrosion; Eye Damage

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

Ingredients	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Sodium Hydroxide	1310-73-2	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
Sodium hypochlorite	7681-52-9	No	N/Ap	Yes	Yes	Yes	Yes	Yes	No

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Canadian Information:
Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

US Information:
AWWA Standard: AWWA B300-18
USDA Authorized Uses: G4

SECTION 16. OTHER INFORMATION

Legend :

ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CSA: Canadian Standards Association
DOT: Department of Transportation
EC50: Effective Concentration 50%
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IBC: Intermediate Bulk Container
ICAO: International Civil Aviation Organisation
IECSC: Inventory of Existing Chemical Substances
IMDG: International Maritime Dangerous Goods
IOC: Inventory of Chemicals
KECI: Korean Existing Chemicals Inventory
KECL: Korean Existing Chemicals List
LC: Lethal Concentration
LD: Lethal Dose
N/Ap: Not Applicable
N/Av: Not Available
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
PICCS: Philippine Inventory of Chemicals and Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

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References : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices
2. ECHA - European Chemical Agency
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases
4. Safety Data Sheets from manufacturer.
5. US EPA Title III List of Lists
6. California Proposition 65 List
7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal

Preparation Date (mm/dd/yyyy) : 12/10/2025

Other special considerations for handling : Provide adequate information, instruction and training for operators.

Prepared for: JCI Jones Chemicals Inc. 1765 Ringling Boulevard Sarasota, FL 34236 USA	
Prepared by: ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada) http://www.thecompliancecenter.com	

DISCLAIMER

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