SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Liquid

Product Name: 1% Sodium Hypochlorite

Synonyms: 1% NaOCl, 1 % Bleach

Intended Use of the Product

Use of the Substance/Mixture: Used as a cleaning agent for the LSA Instrument

Company

Carterra Inc.

825 N 300 W

Suite C309

Salt Lake City, UT 84103

844.642.7635 x736

Emergency Number: 1-800-535-5053 for domestic USA, 1-352-323-3500 for International.

Account Number: 114962

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS-US Classification

Skin corrosion 1B

Serious eye damage 1

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

Signal Word (GHS-US) : **Danger**

Hazard Statements (GHS-US) : **H314 – Causes severe skin burns and eye damage**

Precautionary Statements (GHS-US) : **P280 – Wear protective gloves/protective clothing/eye protection/ face protection**
P-264 – Wash skin thoroughly after handling
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
P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 – Immediately call a POISON CENTER/doctor
P321 – Specific treatment (see supplemental first aid instructions on this label).
P363 – Wash contaminated clothing before reuse.
P405 – Store locked up.
P501 – Dispose of contents/container to an approved waste disposal plant

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	CAS No.	%	Classification
Sodium Hypochlorite	7681-52-9	0.5 – 1.5	H314
Water	7732-18-5	98.5-99.5	None Specified

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show label where possible)

First-aid Measures After Inhalation: Move to fresh air. Call in physician.

First-aid Measures After Skin Contact: Wash off immediately with soap and plenty of water, removing all contaminated clothes and shoes. Call physician.

First-aid Measures After Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses. Consult a physician.

First-aid Measures After Ingestion: Make victim drink water (two glasses at most), avoid vomiting (risk of perforation!). Call a physician immediately. Do not attempt to neutralize.

Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries After Inhalation: Cough, Shortness of breath

Symptoms/Injuries After Skin Contact: Irritation and corrosion

Symptoms/Injuries After Eye Contact: Risk of blindness!

Symptoms/Injuries After Ingestion: None specified

Chronic Symptoms: None specified

Indication of Any Immediate Medical and Special Treatment Needed

Note to Physician: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical, CO2, water spray, or regular foam

Unsuitable Extinguishing Media: None specified

Special Hazards Arising from the Substance or Mixture

Fire Hazard: None

Explosion Hazard: None

Reactivity: No information available

Advice for Firefighters

Precautionary Measures: No information available

Firefighting Instructions: Suppress (knock down) Gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Protection During Firefighting: MSHA/NIOSH (approved or equivalent) and full protective gear.

Hazardous Combustion Products: Hydrogen chloride gas

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

General Measures: Do not breathe vapors, aerosols. Avoid substance contact. Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. Remove and wash contaminated clothing before reuse.

For Non-Emergency Personnel

Protective Equipment: Wear protective gloves/clothing

Emergency Procedures: Evacuate non-essential personnel from laboratory

For Emergency Personnel

Protective Equipment: Wear protective gloves/clothing

Emergency Procedures: Evacuate non-essential personnel from laboratory

Environmental Precautions

Do not let product enter drains.

Methods and Materials for Containment and Cleanup

For Containment: Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions.

Methods for Cleanup: Take up with liquid-absorbent and neutralizing material (e.g. Chemizorb® OH^-, Art. No. 101596). Dispose of properly. Clean up affected area.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety practice. May decompose forming gaseous products, especially when sorted over long periods. Close containers in such a way to enable internal pressure to escape (e.g. excess pressure valve).

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Store at 2-8 °C. Store tightly closed. Protect from light.

Incompatible Products: Do not store in metal containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Component	CAS-No.	Value	Control Parameters
Sodium Hypochlorite	7681-52-9	N/A	None Specified
Water	7732-18-5	Not Established	Not Established

Exposure Controls

Appropriate Engineering Controls	:	Showers, Eyewash stations, Ventilation systems
Materials for Protective Clothing	:	Nitrile rubber
Hand Protection	:	Glove material: Nitrile rubber Glove thickness: 0.11 mm Break through time: 480 min
Eye Protection	:	Avoid contact with eyes. Wear tightly fitting safety goggles
Skin and Body Protection	:	Apply skin-protective barrier cream. Wash hands and face after working with substance.
Respiratory Protection	:	Required when vapors/aerosols are generated. Recommended filter type is B-(P3)
Environmental Exposure Controls	:	None specified
Other Information	:	The protective gloves to be used must comply with the specification of EC Directive 89/686/EEC and the related standard EN374. The breakthrough times stated above were determined by KCL in laboratory tests according to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving or mixing with other substances under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Appearance	:	Clear to slightly yellow
Odor	:	Of chlorine
Odor Threshold	:	No data available
pH	:	11.48 – 11.94
Evaporation Rate	:	No data available
Melting Point	:	No data available
Freezing Point	:	No data available
Boiling Point	:	No data available
Flash Point	:	No data available
Auto Ignition Temperature	:	No data available
Decomposition Temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapor Pressure	:	20 hPa at 20 °C
Relative Vapor Density at 20° C	:	No data available

Relative Density	:	No data available
Specific Gravity	:	No data available
Solubility	:	Miscible with water
Partition Coefficient: N-Octanol/Water	:	No data available
Viscosity	:	No data available

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Heat-sensitive. Sensitivity to light. Sensitivity to air.

Possibility of Hazardous Reactions:

Risk of explosion with:

acids, hydrochloric acid, nitrous gases, chlorine, nitric acid, cyanides, oxidizing agents, reducing agents, oxalic acid, organic substances, methanol, urea, acetic anhydride, ammonia, amines, formic acid

Risk of ignition or formation of flammable gases or vapors with:

arsenic

Generates dangerous gases or fumes in contact with:

acids, ammonia

Conditions to Avoid: Extremes of temperature and direct sunlight, shock, and friction

Incompatible Materials: Ammonia

Hazardous Decomposition Products: Chlorine gas.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Likely Route of Exposure: Inhalation, Eye contact, Skin contact

Target Organs: Skin, Eyes, Stomach

Acute Toxicity:

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite	8,200 mg/kg (Rat)(IUCLID)	None Specified	None Specified

Skin Corrosion/Irritation: Causes irritation and burns

pH: None Specified

Serious Eye Damage/Irritation: Causes serious eye damage. Risk of blindness!

pH: None Specified

Respiratory or Skin Sensitization:

Germ Cell Mutagenicity: None Specified

Carcinogenicity: None Specified

IARC: None Specified

NTP: None Specified

OSHA: None Specified

Reproductive Toxicity: None Specified

Specific Target Organ Toxicity (Single Exposure): The mixture is not classified as specific target organ toxicant, single exposure

Specific Target Organ Toxicity (Repeated Exposure): The mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration Hazard: Regarding the available data, the classification criteria are not fulfilled.

Symptoms/Injuries After Inhalation: Mucosal irritations, Cough, Shortness of breath, Possible damage of respiratory tract.

Symptoms/Injuries After Ingestion: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Chronic Symptoms: None Specified

SECTION 12: ECOLOGICAL INFORMATION

Aquatic toxicity: Harmful to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

Persistence and degradability No further relevant information available**.**

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available. ·
General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods:
Recommendation: No data available
Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary, with cleansing agents.

SECTION 14: TRANSPORT INFORMATION

UN-Number · DOT, IMDG,
UN proper shipping name: UN1791
DOT Potassium hydroxide, solution
IMDG, IATA Hypochlorite Solutions

Transport hazard class(es): Class 8 Corrosive substances · Label 8
IMDG, IATA: Class 8 Corrosive substances · Label 8
Environmental hazards: · Marine pollutant: No
Special precautions for user
Warning: Corrosive substances
Danger code: (Kemler): 80
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.
Transport/Additional information:
DOT Quantity limitations: On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
IMDG Limited quantities (LQ) 1L: Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation": UN 1791

SECTION 15: RREGULATORY INFORMATION

Safety, health, and environmental regulations/legislation specific for the substance or mixture
Section 355 (extremely hazardous substances): None of the ingredients is listed.
Section 313 (Specific toxic chemical listings): None of the ingredients is listed.
TSCA (Toxic Substances Control Act): All ingredients are listed.
Proposition 65 · Chemicals known to cause cancer: None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.
Chemicals known to cause developmental toxicity: None of the ingredients is listed.
Carcinogenic categories ·
EPA (Environmental Protection Agency) None of the ingredients is listed.
TLV (Threshold Limit Value established by ACGIH) None of the ingredients is listed.
NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients is listed. ·
The product is classified and labeled according to the Globally Harmonized System (GHS). ·

Signal word Danger
Chemical safety assessment: A Chemical Safety Assessment has not been carried out

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Quality Assurance.
Creation date for SDS 06/19/2019.
Review SDS for accuracy. 10/24/2022