SECTION 1: IDENTIFICATION

Product Identifier
- Product Form: Mixture
- Product Name: Sodium Hypochlorite
- Synonyms: Bleach

Intended Use of the Product
Bleaching agent; household and laundry bleaching agent; bleaching agent in paper, pulp, textile industry; disinfectant for glass, ceramic and water; algaecide and molluscicide in cooling water for power stations; bleach in alpha-olefin sulphonate production; reactant in hydrazine manufacturing.

Name, Address, and Telephone of the Responsible Party
- Manufacturer: CHEMTRADE LOGISTICS INC.
  155 Gordon Baker Road
  Suite 300
  Toronto, Ontario M2H 3N5
  For SDS Info: (416) 496-5856
  www.chemtradelogistics.com

Emergency Telephone Number
- Emergency Number: Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300
  INTERNATIONAL: +1-703-741-5970
  Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture
- GHS Classification
  - Skin Corr. 1B: H314
  - Eye Dam. 1: H318
  - Aquatic Acute 1: H400
  - Aquatic Chronic 2: H411

Full text of hazard classes and H-statements: see section 16

Label Elements
- GHS Labeling
  - Hazard Pictograms:

Signal Word: Danger

Hazard Statements:
- H290 - May be corrosive to metals.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H400 - Very toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements:
- P234 - Keep only in original container.
- P260 - Do not breathe vapors, mist, or spray.
- P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves, protective clothing, and eye protection.
- P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Sodium Hypochlorite
Safety Data Sheet


P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304+P340 - IF INHALED: Remove person to fresh air and keep 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 or doctor.
P321 - Specific treatment (see section 4 on this SDS).
P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.
P391 - Collect spillage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards
Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Unknown acute toxicity
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Product Identifier</th>
<th>%*</th>
<th>GHS Ingredient Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>83 - 92</td>
<td>Not classified</td>
</tr>
<tr>
<td>Sodium hypochlorite</td>
<td>(CAS-No.) 7681-52-9</td>
<td>7 - 13*</td>
<td>Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

*The actual concentration of the ingredient(s) is withheld as a trade secret in accordance with Regulations Amending the Hazardous Products Regulations (HPR) SOR/2018-68 and 29 CFR 1910.1200.

SECTION 4: FIRST AID MEASURES

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

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Immediately flush skin with plenty of water for at least 60 minutes. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most Important Symptoms and Effects Both Acute and Delayed
General: Corrosive to eyes, respiratory system and skin.

Inhalation: May be corrosive to the respiratory tract.

Skin Contact: Causes severe irritation which will progress to chemical burns.
**Sodium Hypochlorite**

Safety Data Sheet


---

**Eye Contact:** Causes permanent damage to the cornea, iris, or conjunctiva.

**Ingestion:** May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** None expected under normal conditions of use.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

---

**SECTION 5: FIRE-FIGHTING MEASURES**

**Extinguishing Media**

*Suitable Extinguishing Media:* Water spray, dry chemical, foam, carbon dioxide.

*Unsuitable Extinguishing Media:* Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Special Hazards Arising From the Substance or Mixture**

*Fire Hazard:* Not flammable.

*Explosion Hazard:* Product is not explosive.

*Reactivity:* May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

**Advice for Firefighters**

*Precautionary Measures Fire:* Exercise caution when fighting any chemical fire.

*Firefighting Instructions:* Use water spray or fog for cooling exposed containers.

*Protection During Firefighting:* Do not enter fire area without proper protective equipment, including respiratory protection.

*Hazardous Combustion Products:* Sodium oxides. Chlorine.

*Other Information:* Do not allow run-off from fire fighting to enter drains or water courses.

**Reference to Other Sections**

Refer to Section 9 for flammability properties.

---

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures**

*General Measures:* Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

*For Non-Emergency Personnel* 

*Protective Equipment:* Use appropriate personal protective equipment (PPE).

*Emergency Procedures:* Evacuate unnecessary personnel.

*For Emergency Personnel* 

*Protective Equipment:* Equip cleanup crew with proper protection.

*Emergency Procedures:* Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

**Environmental Precautions**

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

**Methods and Materials for Containment and Cleaning Up**

*For Containment:* Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

*Methods for Cleaning Up:* Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage. Cautiously neutralize spilled liquid. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

**Reference to Other Sections**

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

---

**SECTION 7: HANDLING AND STORAGE**

**Precautions for Safe Handling**

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing. Do not breathe vapors, mist, spray.

**Additional Hazards When Processed:** May be corrosive to metals. May release corrosive vapors.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

**Conditions for Safe Storage, Including Any Incompatibilities**
Sodium Hypochlorite
Safety Data Sheet

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container.


Specific End Use(s)
Bleaching agent; household and laundry bleaching agent; bleaching agent in paper, pulp, textile industry; disinfectant for glass, ceramic and water; algicide and molluscicide in cooling water for power stations; bleach in alpha-olefin sulphonate production; reactant in hydrazine manufacturing.

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), OSHA (PEL), Canadian provincial governments, or the Mexican government.

<table>
<thead>
<tr>
<th>Sodium hypochlorite (7681-52-9)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA AIHA</td>
<td>WEEL STEL (mg/m³)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sodium hydroxide (1310-73-2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH Ceiling (mg/m³)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (ceiling) (mg/m³)</td>
</tr>
<tr>
<td>USA IDLH</td>
<td>US IDLH (mg/m³)</td>
</tr>
<tr>
<td>Alberta</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>British Columbia</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>Manitoba</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>Nunavut</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>Ontario</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>Québec</td>
<td>PLAFOND (mg/m³)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td>Yukon</td>
<td>OEL Ceiling (mg/m³)</td>
</tr>
</tbody>
</table>

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.


Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosion-proof clothing.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical safety goggles and face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Sodium Hypochlorite
Safety Data Sheet

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Disagreeable, Sweetish</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>14</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>-25 °C (-13 °F)</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>110 °C (230 °F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Lower Flammable Limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper Flammable Limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>2.3 kPa</td>
</tr>
<tr>
<td>Relative Vapor Density at 20°C</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.19</td>
</tr>
<tr>
<td>Solubility</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>PartitionCoefficient: N-Octanol/Water</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

Reactivity: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high or low temperatures and incompatible materials.


Hazardous Decomposition Products: Hydrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

pH: 14

Eye Damage/Irritation: Causes serious eye damage.

pH: 14

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified
Sodium Hypochlorite

Safety Data Sheet


Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: May be corrosive to the respiratory tract.

Symptoms/Effects After Skin Contact: Causes severe irritation which will progress to chemical burns.

Symptoms/Effects After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Effects After Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Animal</th>
<th>Route of Exposure</th>
<th>Test Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite (7681-52-9)</td>
<td>Oral Rat</td>
<td>8200 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hypochlorite (7681-52-9)</td>
<td>Dermal Rabbit</td>
<td>&gt; 10000 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Fish 1</td>
<td>0.06 (0.06 - 0.11) mg/l</td>
<td>Pimephales promelas [flow-through]</td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Daphnia 1</td>
<td>0.033 - 0.044 mg/l</td>
<td>Daphnia magna [Static]</td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Fish 2</td>
<td>4.5 (4.5 - 7.6) mg/l</td>
<td>Pimephales promelas [static]</td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Daphnia 2</td>
<td>0.033 (0.033 - 0.044) mg/l</td>
<td>Daphnia magna [Static]</td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Fish 1</td>
<td>45.4 mg/l</td>
<td>Oncorhynchus mykiss [static]</td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Daphnia 1</td>
<td>40 mg/l</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LC50</th>
<th>Exposure Time</th>
<th>Test Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite (7681-52-9)</td>
<td>Fish 1</td>
<td>96 h</td>
<td>Pimephales promelas</td>
</tr>
<tr>
<td>Sodium hypochlorite (7681-52-9)</td>
<td>Daphnia 1</td>
<td>48 h</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Fish 1</td>
<td>96 h</td>
<td>Oncorhynchus mykiss</td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Daphnia 1</td>
<td>48 h</td>
<td>Daphnia magna</td>
</tr>
</tbody>
</table>

Persistence and Degradability

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hypochlorite</td>
<td>May cause long-term adverse effects in the environment.</td>
</tr>
</tbody>
</table>

Bioaccumulative Potential

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hypochlorite</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

Mobility in Soil: Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

*When shipped in accordance with US DOT 49 CFR part 171.4(c) and other appropriate sections/provisions this material is not designated as a marine pollutant when transported by road or rail.

**When shipped in accordance with the Canada Transport of Dangerous Goods Regulations part 1.45.1 and other appropriate sections/provisions this material is not designated as a marine pollutant when transported by road or rail.

<table>
<thead>
<tr>
<th>TRANSPORTATION CLASSIFICATION</th>
<th>DOT</th>
<th>TDG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification Number</td>
<td>UN1791</td>
<td>UN1791</td>
<td>UN1791</td>
<td>UN1791</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>HYPOCHLORITE SOLUTION</td>
<td>HYPOCHLORITE SOLUTION</td>
<td>HYPOCHLORITE SOLUTION</td>
<td>HYPOCHLORITE SOLUTION</td>
</tr>
</tbody>
</table>
## Sodium Hypochlorite Safety Data Sheet


<table>
<thead>
<tr>
<th>Transport Hazard Class(es)</th>
<th>8</th>
<th>8</th>
<th>8</th>
<th>8</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Packing Group</th>
<th>II</th>
<th>II</th>
<th>II</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Hazards</td>
<td>Marine Pollutant: Yes*</td>
<td>Marine Pollutant: Yes**</td>
<td>Marine Pollutant: Yes</td>
<td>Marine Pollutant: N/A</td>
</tr>
<tr>
<td>Emergency Response</td>
<td>ERG Number: 154</td>
<td>ERAP Index: Not applicable</td>
<td>EMS: F-A, S-B</td>
<td>ERG code (IATA): 8L</td>
</tr>
</tbody>
</table>

### Additional Information
Not applicable Not applicable Not applicable Not applicable

## SECTION 15: REGULATORY INFORMATION

### US Federal Regulations

<table>
<thead>
<tr>
<th>Chemical Name (CAS No.)</th>
<th>CERCLA RQ</th>
<th>EPCRA 304 RQ</th>
<th>SARA 302 TPQ</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite (7681-52-9)</td>
<td>100 lb</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>No</td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>1000 lb</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>No</td>
</tr>
</tbody>
</table>

### SARA 311/312

**Sodium Hypochlorite**
Immediate (acute) health hazard

**US TSCA Flags** Not present

### US State Regulations

#### California Proposition 65

<table>
<thead>
<tr>
<th>Chemical Name (CAS No.)</th>
<th>Carcinogenicity</th>
<th>Developmental Toxicity</th>
<th>Female Reproductive Toxicity</th>
<th>Male Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite (7681-52-9)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### State Right-To-Know Lists

#### Sodium hypochlorite (7681-52-9)

- U.S. - Massachussetts - Right To Know List - Yes
- U.S. - New Jersey - Right to Know Hazardous Substance List - Yes
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - Yes
- U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
- U.S. - Pennsylvania - RTK (Right to Know) List - Yes

#### Sodium hydroxide (1310-73-2)

- U.S. - Massachussetts - Right To Know List - Yes
- U.S. - New Jersey - Right to Know Hazardous Substance List - Yes
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - Yes
- U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
- U.S. - Pennsylvania - RTK (Right to Know) List - Yes

### Canadian Regulations

#### Sodium hypochlorite (7681-52-9)

- Listed on the Canadian DSL (Domestic Substances List)
- Not listed on the Canadian NDSL (Non-Domestic Substances List)

#### Sodium hydroxide (1310-73-2)

- Listed on the Canadian DSL (Domestic Substances List)
- Not listed on the Canadian NDSL (Non-Domestic Substances List)
Sodium Hypochlorite
Safety Data Sheet


International Inventories/Lists

<table>
<thead>
<tr>
<th>Chemical Name (CAS No.)</th>
<th>Australia AICS</th>
<th>Turkey CICR</th>
<th>Korea ECL</th>
<th>EU EINECS</th>
<th>EU ELINCS</th>
<th>EU SVHC</th>
<th>EU NLP</th>
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<td>Sodium hypochlorite (7681-52-9)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<th>Japan ISHL</th>
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<td>No</td>
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SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision: 05/09/2018

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada’s Hazardous Products Regulations (HPR).

Revision Summary

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<td>3</td>
<td>HPR Information</td>
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GHS Full Text Phrases:

- Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard Category 1
- Aquatic Acute 3: Hazardous to the aquatic environment - Acute Hazard Category 3
- Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard Category 2
- Eye Dam. 1: Serious eye damage/eye irritation Category 1
- Met. Corr. 1: Corrosive to metals Category 1
- Skin Corr. 1A: Skin corrosion/irritation Category 1A
- Skin Corr. 1B: Skin corrosion/irritation Category 1B
- H290: May be corrosive to metals
- H314: Causes severe skin burns and eye damage
- H318: Causes serious eye damage
- H400: Very toxic to aquatic life
- H402: Harmful to aquatic life
- H410: Very toxic to aquatic life with long lasting effects
- H411: Toxic to aquatic life with long lasting effects

NFPA 704

- NFPA Health Hazard: 3
- NFPA Fire Hazard: 0
- NFPA Reactivity Hazard: 1
Sodium Hypochlorite

Safety Data Sheet


HMIS Rating

<table>
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<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical</th>
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Abbreviations and Acronyms

- AICS – Australian Inventory of Chemical Substances
- ACGIH – American Conference of Governmental Industrial Hygienists
- AIHA – American Industrial Hygiene Association
- ATE - Acute Toxicity Estimate
- BCF - Bioconcentration factor
- BEI - Biological Exposure Indices (BEI)
- CAS No. - Chemical Abstracts Service number
- CERCLA RQ - Comprehensive Environmental Response, Compensation, and Liability Act - Reportable Quantity
- CICR - Turkish Inventory and Control of Chemicals
- EC50 - Median effective concentration
- ECL - Korea Existing Chemicals List
- EINECS - European Inventory of Existing Commercial Chemical Substances
- ELINCS - European List of Notified Chemical Substances
- EmS - IMDG Emergency Schedule Fire & Spillage
- ENCS - Japanese Existing and New Chemical Substances Inventory
- EPA – Environmental Protection Agency
- EPCRA 304 RQ – EPCRA 304 Extremely Hazardous Substance Emergency Planning and Community Right-to-Know Act – Reportable Quantity
- ERAP Index – Emergency Response Assistance Plan Quantity Limit
- ErCSO - EC50 in Terms of Reduction Growth Rate
- ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)
- ERG No. - Emergency Response Guide Number
- HCCL - Hazard Communication Carcinogen List
- HMIS – Hazardous Materials Information System
- IARC - International Agency for Research on Cancer
- IATA - International Air Transport Association – Dangerous Goods Regulations
- IDLH - Immediately Dangerous to Life or Health
- IECS – Inventory of Existing Chemical Substances Produced or Imported in China
- IMDG - International Maritime Dangerous Goods Code
- INSQ - Mexican National Inventory of Chemical Substances
- ISHL - Japan Industrial Safety and Health Law
- LC50 - Median Lethal Concentration
- LD50 - Median Lethal Dose
- LOAEL - Lowest Observed Adverse Effect Level
- LOEC - Lowest-observed-effect Concentration
- Log Pow - Octanol/water Partition Coefficient
- NIOSH - National Institute for Occupational Safety and Health
- NLP - Europe No Longer Polymers List
- NOAEL - No-Observed Adverse Effect Level
- NOEC - No-Observed Effect Concentration
- OEL - Occupational Exposure Limits
- OSHA – Occupational Safety and Health Administration
- PEL - Permissible Exposure Limits
- PICCS - Philippine Inventory of Chemicals and Chemical Substances
- PDSC - Japan Poisonous and Deleterious Substances Control Law
- PPE – Personal Protective Equipment
- PRTR - Japan Pollutant Release and Transfer Register
- REL - Recommended Exposure Limit
- SADT - Self Accelerating Decomposition Temperature
- SAR - Superfund Amendments and Reauthorization Act
- SARA 302 - Section 302, 40 CFR Part 355
- SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories
- SARCL - Specifically Regulated Carcinogen List
- SVHC – European Candidate List of Substance of Very High Concern
- TLM - Median Tolerance Limit
- TLV - Threshold Limit Value
- TPQ - Threshold Planning Quantity
- TSCA – United States Toxic Substances Control Act
- TWA - Time Weighted Average
- WEEL - Workplace Environmental Exposure Levels

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA’S “Right to Know” (29 CFR 1910.1200) and Canada’s WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.

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