



# Sodium Hypochlorite Solution

## Commercial Chlor/Commercial Chlor Extra

### Safety Data Sheet

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Identification

Product name : Sodium Hypochlorite Solution

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Industrial and Commercial Uses

##### 1.3. Details of the supplier of the safety data sheet

PoolSure  
1707 Townhurst  
Houston, TX 77043  
T 800-858-7665

##### 1.4. Emergency telephone number

No additional information available

#### SECTION 2: Hazard(s) identification

##### 2.1. Classification of the substance or mixture

###### Classification (GHS-US)

Skin Corr. 1A H314  
Eye Dam. 1 H318

Full text of H-phrases: see section 16

##### 2.2. Label elements

###### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) :

P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P264 - Wash thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
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/doctor  
P363 - Wash contaminated clothing before reuse  
P405 - Store locked up  
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

##### 2.3. Other hazards

No additional information available

##### 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### SECTION 3: Composition/information on ingredients

##### 3.1. Substance

Not applicable

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#### 3.2. Mixture

| Name                | Product identifier | %      | Classification (GHS-US)                                       |
|---------------------|--------------------|--------|---|
| Sodium hypochlorite | (CAS No) 7681-52-9 | 9 - 13 | Not classified  |
| Sodium hydroxide    | (CAS No) 1310-73-2 | <= 1.5 | Met. Corr. 1, H290<br>Skin Corr. 1A, H314<br>Eye Dam. 1, H318 |

Full text of H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures after inhalation   | : Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.  |
| First-aid measures after skin contact | : Take off contaminated clothing. Rise skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice.   |
| First-aid measures after eye contact  | : Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. Remove contact lenses. See a doctor immediately. |
| First-aid measures after ingestion    | : Have person sip a glass of water if able to swallow. Call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.                      |

### 4.2. Most important symptoms and effects, both acute and delayed

|                                      |  |
|--------------------------------------|--|
| Symptoms/injuries after inhalation   | : Inhalation of vapors will irritate breathing passages and may cause breathing difficulty.  |
| Symptoms/injuries after skin contact | : Causes severe burns. May cause permanent damage if not treated properly.   |
| Symptoms/injuries after eye contact  | : Causes eye damage. May cause permanent damage if not treated properly.   |
| Symptoms/injuries after ingestion    | : Ingestion will cause burning sensation in mouth, throat and stomach. Will cause membrane irritation and pain and inflammation to digestive tract, Could cause vomiting and shock |

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                |  |
|--------------------------------|--|
| Suitable extinguishing media   | : Water, Carbon Dioxide, Dry Chemical or Foam. |
| Unsuitable extinguishing media | : None.  |

### 5.2. Special hazards arising from the substance or mixture

|                  |               |
|------------------|---------------|
| Fire hazard      | : None known. |
| Explosion hazard | : None known. |

### 5.3. Advice for firefighters

|                                |  |
|--------------------------------|--|
| Protection during firefighting | : Firefighters should wear full protective gear. |
|--------------------------------|--|

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

|                         |  |
|-------------------------|--|
| For containment         | : Stop the flow of material, if this is without risk.  |
| Methods for cleaning up | : Leaking product may be transferred to clean plastic containers. Dilute small spills with water and add sodium sulfite or sodium metabisulfite and flush to sewer. Avoid runoff to ground water, surface water and sanitary sewers For major spills contain the spill and call supplier Place in an approved container and dispose in accordance with local, state and federal regulations. |

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#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with eyes, skin and clothing.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Use polyethylene, polypropylene, FRP or PVC containers. Store product at- 10C to 30C and away from sunlight or heat. Keep containers closed when not in use and keep out of reach of children.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

| Sodium hydroxide (1310-73-2) |                                     |                     |
|------------------------------|-------------------------------------|---------------------|
| ACGIH                        | ACGIH Ceiling (mg/m <sup>3</sup> )  | 2 mg/m <sup>3</sup> |
| OSHA                         | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 2 mg/m <sup>3</sup> |

#### 8.2. Exposure controls

Hand protection : Use acid resistant gloves.  
Eye protection : Chemical goggles or safety glasses.  
Skin and body protection : Wear suitable working clothes.  
Respiratory protection : None required under normal product use conditions.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Color : Colorless  
Odor : Chlorine  
Odor threshold : No data available  
pH : 12.3 - 12.9  
Melting point : No data available  
Freezing point : No data available  
Boiling point : 105 °C  
Flash point : No data available  
Relative evaporation rate (butyl acetate=1) : No data available  
Flammability (solid, gas) : No data available  
Explosion limits : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available  
Vapor pressure : 22 mm Hg @ 20°C  
Specific gravity : 1.15  
Relative vapor density at 20 °C : No data available  
Solubility : Miscible with water.  
Log Pow : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Viscosity : No data available  
Viscosity, kinematic : No data available  
Viscosity, dynamic : No data available

#### 9.2. Other information

No additional information available

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#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

No additional information available

##### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

##### 10.3. Possibility of hazardous reactions

Will not occur.

##### 10.4. Conditions to avoid

Temperature above 40°C, sunlight and metals

##### 10.5. Incompatible materials

Acids, ammonia, urea, metals & oxidizers

##### 10.6. Hazardous decomposition products

Chlorine gas released by contact with acids. Contact with ammonia or urea produces nitrogen gas and chloramines. Oxygen is released on contact with metals.

#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| Sodium hypochlorite (7681-52-9) |                |
|---------------------------------|----------------|
| LD50 oral rat                   | 8200 mg/kg     |
| LD50 dermal rabbit              | > 10000 mg/kg  |
| ATE US (oral)                   | 8200.000 mg/kg |

| Sodium hydroxide (1310-73-2) |                |
|------------------------------|----------------|
| LD50 dermal rabbit           | 1350 mg/kg     |
| ATE US (dermal)              | 1350.000 mg/kg |

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: 12.3 - 12.9

Serious eye damage/irritation : Causes serious eye damage.

pH: 12.3 - 12.9

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

| Sodium hypochlorite (7681-52-9) |                      |
|---------------------------------|----------------------|
| IARC group                      | 3 - Not classifiable |

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

#### SECTION 12: Ecological information

##### 12.1. Toxicity

| Sodium hypochlorite (7681-52-9) |  |
|---------------------------------|--|
| LC50 fish 1                     | 0.06 - 0.11 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 1                  | 0.033 - 0.044 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])           |
| LC50 fish 2                     | 4.5 - 7.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [Static])         |

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

LC50 fish 1 : 45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1791 Hypochlorite solutions, 8, III

UN-No.(DOT) : UN1791

Proper Shipping Name (DOT) : Hypochlorite solutions

Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP24 - The portable tank may be fitted with a device to prevent the build up of excess pressure due to the slow decomposition of the hazardous material being transported. The device must be in the vapor space when the tank is filled under maximum filling conditions. This device must also prevent an unacceptable amount of leakage of liquid in the case of overturning.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

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DOT Quantity Limitations Passenger aircraft/rail : 5 L  
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L  
CFR 175.75)

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

DOT Vessel Stowage Other : 26 - Stow "away from" acids

Reportable Quantity (RQ) : 100lb (45.4 kg) or 93 gallons (based on 10.5% active ingredient)

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

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

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. US State regulations

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

U.S. - Massachusetts - Right To Know List  
U.S. - Minnesota - Hazardous Substance List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

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

U.S. - Massachusetts - Right To Know List  
U.S. - Minnesota - Hazardous Substance List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Full text of H-phrases:

|               |  |
|---------------|--|
| 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        |
| H290          | May be corrosive to metals                   |
| H314          | Causes severe skin burns and eye damage      |
| H318          | Causes serious eye damage                    |

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*