

## 1. Identification

<b>Product identifier</b>	<b>Sodium Hypochlorite 12.5%</b>
<b>Other means of identification</b>	
<b>SDS Number</b>	320222-08
<b>Product registration number</b>	EPA 148-1288
<b>Recommended use</b>	Bleaching agent; water treatment; disinfectant; detergent; cleaning agent.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Company name</b>	Harcros Chemicals Inc
<b>Address</b>	5200 Speaker Rd. Kansas City, KS 66106 United States
<b>Main Telephone Number</b>	1-913-321-3131
<b>Website</b>	www.harcros.com
<b>E-mail</b>	custserv@harcros.com
<b>Emergency #: CHEMTREC</b>	1-800-424-9300
<b>Emergency #: CHEMTREC</b>	1-703-741-5970 (International Number - Call collect)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Skin corrosion/irritation Category 1 Serious eye damage/eye irritation Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard Category 1 Hazardous to the aquatic environment, long-term hazard Category 1
<b>OSHA defined hazards</b>	Not classified.

### Label elements



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Do not breathe mist or vapors. Avoid release to the environment. Wear eye protection/face protection. Wear protective impervious gloves, protective clothing, eye protection/face protection.
<b>Response</b>	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wash contaminated clothing before reuse.
<b>Storage</b>	Store away from incompatible materials. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in accordance with local, regional, national, and international regulations.
<b>Disposal</b>	Dispose of contents and container in accordance with local, regional, national, and international regulations.

**Hazard(s) not otherwise classified (HNOC)**

None known.

**Supplemental information**

22.4% of the mixture consists of component(s) of unknown acute dermal toxicity. 12.5% of the mixture consists of component(s) of unknown acute inhalation toxicity. 9.9% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 9.9% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. Composition/information on ingredients

**Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	75 - 80
Sodium Hypochlorite		7681-52-9	11.9 - 15.6
Sodium Hydroxide		1310-73-2	0.1 - 2
Sodium Chloride		7647-14-5	≤ 12.5

### 4. First-aid measures

**Inhalation**

Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

**Ingestion**

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms/effects, acute and delayed**

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**Indication of immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

**General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

**Suitable extinguishing media**

Foam. Powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**

During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**

Move containers from fire area if you can do so without risk.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

No unusual fire or explosion hazards noted.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Absorb/clean with appropriate and compatible material. Stop flow of material if without risk. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Do not breathe mist or vapors. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Sodium Hydroxide (CAS 1310-73-2)	PEL	2 mg/m3

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

#### US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Sodium Hypochlorite (CAS 7681-52-9)	STEL	2 mg/m3

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Not available.

### Individual protection measures, such as personal protective equipment

#### General

It is recommended that users of this product perform a risk assessment to determine the appropriate PPE.

#### Eye/face protection

Do not get in eyes. Wear chemical goggles and face shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant, impervious gloves. Wear protective gloves. For prolonged or repeated skin contact use suitable protective and impervious gloves.

##### Other

Wear appropriate chemical resistant clothing.

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

Clear.

#### Physical state

Liquid.

#### Form

Liquid.

#### Color

Clear to pale yellow.

### Odor

Chlorine.

### Odor threshold

Not available.

### pH

12 - 14 (1% in DI Water)

### Melting point/freezing point

-4 - 3 °F (-20 - -16.11 °C)

<b>Initial boiling point and boiling range</b>	> 230 °F (> 110 °C)
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	12 mm Hg @ 20°C
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Specific gravity</b>	1.209 @ 20°C

## 10. Stability and reactivity

<b>Reactivity</b>	Reacts violently with strong acids. This product may react with oxidizing agents.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Reacts violently with strong acids. This product may react with oxidizing agents. Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not mix with other chemicals.
<b>Incompatible materials</b>	Strong acids. Bases, alkalis (organic). Oxidizing agents.
<b>Hazardous decomposition products</b>	Chlorine. Hydrogen chloride.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes severe skin burns.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Causes digestive tract burns.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
---	---

### Information on toxicological effects

<b>Acute toxicity</b>	Not known.
-----------------------	------------

Components	Species	Test Results
Sodium Chloride (CAS 7647-14-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	3000 mg/kg

Components	Species	Test Results
Sodium Hydroxide (CAS 1310-73-2)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rat	1350 mg/kg
<b>Oral</b>		
LD50	Rat	140 - 340 mg/kg
Sodium Hypochlorite (CAS 7681-52-9)		
<u>Acute</u>		
<b>Oral</b>		
LD50	Rat	8.91 g/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Skin sensitization</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Carcinogenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Sodium Hypochlorite (CAS 7681-52-9)		3 Not classifiable as to carcinogenicity to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b>		
Not listed.		
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
Not listed.		
<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful.	

## 12. Ecological information

Ecotoxicity		Very toxic to aquatic life with long lasting effects.	
Product	Species		Test Results
Sodium Hypochlorite 12.5%			
Aquatic Crustacea	EC50		40 mg/l, 96 hours Nittocra Spinipes Fasciatus
			4 mg/l, 96 hours Gammarus Fasciatus
	EC50	Daphnia	2519.1724 mg/l, 48 hours estimated
			0.07 - 0.7 mg/l, 24 hours magna
Fish			0.006 mg/l, 24 hours Ceriodaphina sp.
	LC50	Fish	12.5131 mg/l, 96 hours estimated
Components	Species		Test Results
Sodium Chloride (CAS 7647-14-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	340.7 - 469.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	6020 - 7070 mg/l, 96 hours

Components	Species		Test Results
Sodium Hydroxide (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/l, 48 hours
	LC50	Common shrimp, sand shrimp (Crangon crangon)	33 - 100 mg/l, 48 hours
Fish	LC50	Bony fish superclass (Osteichthyes)	33 - 100 mg/l, 48 hours
		Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours
Sodium Hypochlorite (CAS 7681-52-9)			
Aquatic			
Fish	LC50	Chinook salmon (Oncorhynchus tshawytscha)	0.038 - 0.065 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available.		
Mobility in soil	No data available.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		
13. Disposal considerations			
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.		
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).		
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.		
14. Transport information			
DOT			
UN number	UN1791		
UN proper shipping name	Hypochlorite solutions (Sodium Hypochlorite), MARINE POLLUTANT		
Transport hazard class(es)			
Class	8		
Subsidiary risk	-		
Label(s)	8		
Packing group	III		
Environmental hazards			
Marine pollutant	Yes		
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.		
Special provisions	IB3, N34, T4, TP2, TP24		
Packaging exceptions	154		
Packaging non bulk	203		
Packaging bulk	241		
Reportable Quantity for Sodium Hypochlorite = 100 lbs.			
Not a Marine Pollutant by DOT in containers of 119 gallons or less.			
IATA			
UN number	UN1791		
UN proper shipping name	Hypochlorite solution (Sodium Hypochlorite)		
Transport hazard class(es)			
Class	8		
Subsidiary risk	-		
Packing group	III		
Environmental hazards	Yes		
ERG Code	8L		
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.		

#### Other information

Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

#### IMDG

UN number	UN1791
UN proper shipping name	Hypochlorite solution (Sodium Hypochlorite), MARINE POLLUTANT
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not established.

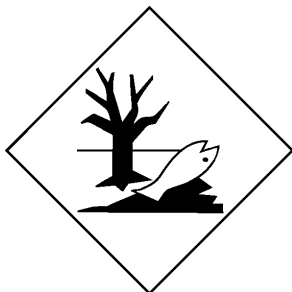
#### DOT



#### IATA; IMDG



#### Marine pollutant



General information      IMDG Regulated Marine Pollutant.

## 15. Regulatory information

**US federal regulations**      This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Toxic Substances Control Act (TSCA)**      All components of the mixture on the TSCA 8(b) inventory are designated "active".

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Sodium Hydroxide (CAS 1310-73-2)

Listed.

Sodium Hypochlorite (CAS 7681-52-9)

Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**

Yes

**Classified hazard categories**

Skin corrosion or irritation

Serious eye damage or eye irritation

**SARA 313 (TRI reporting)**

Not regulated.

**US state regulations****California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Sodium Hydroxide (CAS 1310-73-2)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	05-05-2014
<b>Revision date</b>	11-19-2019
<b>Version #</b>	16
<b>HMIS® ratings</b>	Health: 3 Flammability: 0 Physical hazard: 1
<b>NFPA ratings</b>	Health: 3 Flammability: 0 Instability: 1



**Disclaimer**

The information provided in this Safety Data Sheet has been obtained from sources believed to be reliable. Harcros Chemicals Inc., provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration, and investigation. You should satisfy yourself that you have all current data relevant to your particular use. Harcros Chemicals Inc., knows of no medical condition, other than those noted on this Safety Data Sheet, which are generally recognized as being aggravated by exposure to this product.

**Revision information**

Product and Company Identification: Product and Company Identification

Hazard(s) identification: Disposal

Hazard(s) identification: Prevention

Hazard(s) identification: Storage

Accidental release measures: Personal precautions, protective equipment and emergency procedures

Accidental release measures: Methods and materials for containment and cleaning up

Handling and storage: Precautions for safe handling

Exposure controls/personal protection: Appropriate engineering controls

Exposure controls/personal protection: General

Exposure controls/personal protection: Hand protection

Physical & Chemical Properties: Multiple Properties

Transport Information: Material Transportation Information

Other information, including date of preparation or last revision: Disclaimer

GHS: Classification