

# SAFETY DATA SHEET

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Preparation Date: 01/01/2019 Revision Date: N/A Revision Number: 1

**SECTION 1** identification

# 1.1. Product Identifier

Trade Name or Designation: Sodium Hypochlorite, 12.5%

Product Number: PS18142

### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

# 1.3. Details of the Supplier of the Safety Data Sheet

# **Dawn Scientific Inc**

121 Liberty Street, Metuchen, NJ, 08840 Tel: 732-902-6300 | Fax: 973-802-1005

sales@dawnscientific.com | www.dawnscientific.com

# 1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

### SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

		Hazard	
Hazard Class			
Skin Corrosion / Irritation	Category 1A	H314	P260, P264, P280, P301+P330+P331,
			P303+P361+P353, P363, P304+P340, P310,
			P321, P305+P351+P338, P405, P501
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310
Specific Target Organs/Systemic Toxicity Following Repeated	Category 2	H373	P260, P314, P501
Exposure			
Corrosive to Metals	Category 1	H290	P234, P390, P406
Hazardous to the Aquatic Environment (Acute)	Category 2	H401	P273, P501
Hazardous to the Aquatic Environment (Chronic)	Category 2	H411	P273, P391, P501

### 2.2. GHS Label Elements

Pictograms:



Signal Word:

**Danger** 

#### Hazard Statements:

Hazard Number	Hazard Statement
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

### Precautionary Statements:

Precautionary Number	Precautionary Statement
P234	Keep only in original container.
P260	Do not breathe fumes, mist, vapors, or spray.
P264	Wash arms, hands and face thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye 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.
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 physician.
P314	Get medical attention if you feel unwell.
P321	Specific treatment (Wash areas of contact with water).
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 in accordance with local, state, federal and international regulations.

# 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

### SECTION 3: Composition / Information on Ingredients

# 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H <sub>2</sub> O	18.01 g/mol	7732-18-5	86.5-87.5
Sodium Hypochlorite	NaOCl	74.44 g/mol	7681-52-9	12.5-13-5

### SECTION 4: First-Aid Measures

# 4.1. General First Aid Information

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing. May cause irritation, redness, pain, and tearing.

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. May cause irritation, redness,

and pain.

Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Dilute with water or milk. Vomiting may occur spontaneously but

do not induce. Call a physician immediately.

#### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Causes severe skin burns and eye damage. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure. Irritating to the eyes, skin and respiratory system. Irritating rash may develop upon contact. Wash areas of contact with water. Call a physician if irritation develops. May cause headache, dizziness, nausea, vomiting. If ingested, dilute with water. Do not induce vomiting. Vomiting may occur spontaneously. Call a physician. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness, and pain.

### 4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Vomiting may occur spontaneously but do not induce. Call a physician immediately.

#### SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

# 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard. Substance releases oxygen when heated. Containers may rupture from pressure build-up.

#### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

#### SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

# 6.2. Cleanup and Containment Methods and Materials

Dilute with water, then flush to sewer if local regulations allow. If not allowed, save for recovery or recycling in an approved waste disposal facility. Always dispose of in accordance with local, state and federal regulations.

### SECTION 7: Handling and Storage

# 7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Do not mix with household chemicals.

### SECTION 8: Exposure Controls / Personal Protection

### 8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Data not available.				

### 8.2. Exposure Controls

Engineering Controls:	A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne
	Exposure Limit.
Respiratory Protection:	Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic
	vapor cartridge may be worn.
Skin Protection:	Wear protective gloves and eye protection. Chemical resistant gloves.
Eye Protection:	Wear protective gloves and eye protection. Safety glasses or goggles.

# 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn. Chemical resistant gloves. Safety glasses or goggles.

### SECTION 9: Physical and Chemical Properties

# 9.1. Basic Physical and Chemical Properties

Appearance: Colorless to greenish-yellow liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: alkaline

Melting/Freezing Point: Approximately 0°C

Initial Boiling Point/Range: Approximately 100°C -

Flash Point: Data not available.

Evaporation Rate: Data not available.

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Vapor Pressure: Data not available.

Vapor Density: Data not available.

Relative Density: 1.05

Solubility: Miscible

Partition Coefficient: Data not available.

Auto-Ignition Temperature: Data not available.

Decomposition Temperature: Data not available.

Viscosity: Data not available.

Explosive Properties: Data not available.

Oxidizing Properties: Data not available.

### SECTION 10: Stability and Reactivity

# 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage. Slowly decomposes on contact with air. Exposure to sunlight accelerates decomposition.

Becomes less hazardous with age.

### 10.2. Possibility of Hazardous Reactions

Data not available.

### 10.3. Conditions to Avoid and Incompatible Materials

Keep only in original container. Ammonia (chloramine gas may evolve), amines, ammonium salts, methanol, cellulose, ethyleneimine, oxidizable metals, acids, rust removers, soaps and bisulfates.

# 10.4. Hazardous Decomposition Products

Will not occur.

# 11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

No LD50 (oral, rat) information available from "Registry of Toxic Effects of Chemical Substances". Irritation data: Eye, Rabbit (Standard Draize, Sodium Hypochlorite) 10 mg, moderate. Investigated as a mutagen (Sodium Hypochlorite).

#### Skin Corrosion and Irritation:

Causes severe skin burns and eye damage. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. 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 CENTER or physician. Specific treatment (Wash areas of contact with water). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure. Do not breathe fumes, mist, vapors, or spray. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

### SECTION 12: Ecological Information

### 12.1. Ecotoxicity

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

Toxic to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage. Dispose of contents in accordance with local, state, federal and international regulations.

# 12.2. Persistence and Degradability

Data not available.

#### 12.3. Bioaccumulative Potential

Data not available.

# 12.4. Mobility in Soil

Data not available.

# 12.5. Other Adverse Ecological Effects

Data not available.

#### SECTION 13: Disposal Considerations

### 13.1. Waste Treatment Methods

Data not available.

#### SECTION 14: Transportation Information

# 14.1. Transportation by Land-Department of Transportation (DOT, United States of America)

Sizes: 4 L, 500 mL

UN Number: UN1791

Proper Shipping Name: Hypochlorite Solutions

Hazard Class: 8
Packing Group: III

Hazard Label(s):



# 14.2. Transportation by Air - International Air Transport Association (IATA)

Sizes: 4 L, 500 mL

UN Number: UN1791

Proper Shipping Name: Hypochlorite Solution

Hazard Class: 8

Packing Group: III

Hazard Label(s):



### 14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 4 L, 500 mL

UN Number: UN1791

Proper Shipping Name: HYPOCHLORITE SOLUTIONS

Hazard Class: 8

Packing Group: II

Hazard Label(s):



### SECTION 15: Regulatory Information

# 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

# 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

# 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Sodium Hypochlorite (CAS # 7681-52-9): 100 lb final RQ; 45.4 kg final RQ

# 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Not listed.

### 15.5. Massachusetts Right-to-Know Substance List

Sodium Hypochlorite (CAS # 7681-52-9): Present

# 15.6. Pennsylvania Right-to-Know Hazardous Substances

Sodium Hypochlorite (CAS # 7681-52-9): Environmental hazard

Sodium Hypochlorite (CAS # 7681-52-9): Present

Water (CAS # 7732-18-5): Present

### 15.7. New Jersey Worker and Community Right-to-Know Components

Sodium Hypochlorite (CAS # 7681-52-9): corrosive

Sodium Hypochlorite (CAS # 7681-52-9): sn 1707

# 15.8. California Proposition 65

Not listed.

# 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Sodium Hypochlorite (CAS # 7681-52-9): Present (DSL)

Water (CAS # 7732-18-5): Present (DSL)

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.

Sodium Hypochlorite (CAS # 7681-52-9): Present

Water (CAS # 7732-18-5): Present

# 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European

# List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Sodium Hypochlorite (CAS # 7681-52-9): 231-668-3

Water (CAS # 7732-18-5): 231-791-2

Water (CAS # 7732-18-5): 232-148-9

### 16.1. Full Text of Hazard Statements and Precautionary Statements

May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Keep only in original container. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Avoid release to the environment. Wear protective gloves and eye protection.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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. Immediately call a POISON CENTER or physician. Get medical attention if you feel unwell. Specific treatment (Wash areas of contact with water). Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Collect spillage.

Store locked up. Store in corrosive resistant container with a resistant inner liner.

Dispose of contents in accordance with local, state, federal and international regulations.

#### 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

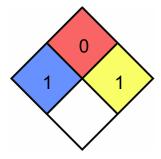
Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Biohazardous Infectious Materials Hazard Class: Not Applicable.

# 16.3. National Fire Protection Association (NFPA) Rating

Health: 1
Flammability: 0
Reactivity: 1

Special Hazard:



### 16.4. Document Revision

Last Revision Date: 01/01/2019

# **DISCLAIMER**

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and Dawn Sciemtic Inc assumes no legal responsibility or liability whatsoever resulting from its use.