

**In Case of Emergency, contact Chemtrec 1-800-424-9300**

## 1) Product Identification

### **WT-17 Sodium Hypochlorite, 12.5% Solution**

Trade Name/Synonyms: Bleach  
Chemical Family: Inorganic, salt

## 2) Hazards Identification

**GHS 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.



### **Precautionary Statements:**

P234 Keep only in original container.  
P260 Do not breathe dusts or mists.  
P264 Wash exposed skin thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
P304+340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing.  
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
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 resistant inner liner.  
P501 Dispose of contents/container in accordance with specified local/regional/national/international regulations for disposal.

### **POTENTIAL HEALTH EFFECTS**

**Skin Contact:** May cause moderate to severe irritation consisting of discomfort, itching, redness and swelling.

**Skin Absorption:** No data available.

**Eyes:** Contact with the eyes causes redness, tearing, and blurred vision. May cause burns to eyes.

**Ingestion:** Ingestion causes pain and inflammation of the mouth, gastrointestinal tract, and erosion of the mucous membranes.

**Inhalation:** Inhalation may cause irritation, burning sensation, coughing, wheezing, laryngitis, and shortness of breath or headache. May cause lung damage/edema.

**Medical Conditions Aggravated:** No data available.

### 3) Information on Ingredients

Component	CAS #	% by Weight
Sodium chloride	7647-14-5	9-10
Sodium hydroxide	1310-73-2	<2
Sodium hypochlorite	7681-52-9	12-13

### 4) First Aid Measures

**Skin Contact:** Remove contaminated clothing and shoes. Wash exposed areas with soap and water. Call a physician if irritation persists.

**Eye Contact:** Flush eyes with water for at least 15 minutes. Get immediate medical attention.

**Ingestion:** Call a physician immediately! Do not induce vomiting. Give 1-2 glasses of water to dilute. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Do not give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air. If breathing has stopped, give artificial respiration. Get immediate medical attention.

### 5) Fire Fighting Measures

**Flash Point:** Not applicable.

**Flammability Limits:** LEL—Not available. UEL—Not available.

**Autoignition Temperature:** Not available.

**Flammability Classification:** Not applicable.

**Extinguishing Media:** This product is not flammable. Use extinguishing media for surrounding fire.

**Firefighting:** Use water spray to disperse vapors and to provide protection for persons attempting to stop leak. Cool fire-exposed containers with water spray.

**Protective Equipment:** Use NIOSH-approved self-contained breathing apparatus and complete protective clothing when fighting chemical fires.

**Fire Hazards:** Closed containers of this product may explode when exposed to excessive heat. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Avoid contact with combustible materials. May ignite or explode on contact with combustible materials. May ignite or explode on contact with combustible materials.

### 6) Accidental Release Measures

**Small Spills:** Eliminate all sources of ignition. Contain spill and ventilate area. Absorb on inert media and containerize for disposal.

**Large Spills:** Eliminate all sources of ignition. Contain spill and ventilate area. Permit only trained personnel wearing full protective equipment to enter the spill area. Collect the spill in a waste container or remove with a vacuum truck. Prevent spill from entering natural watercourses.

**Protective Equipment/Spill-Release Instructions:** Do not use combustible absorbents. Wear complete protective clothing when cleaning up chemical spills. Spills and releases may have to be reported to federal and/or local authorities.

## 7) Handling and Storage

**Handling:** Avoid contact with skin, eyes, and clothing. Avoid breathing product vapors and mists. Do not take internally. Wash thoroughly after handling this material. Use this material only with adequate ventilation.

**Storage:** Keep container closed when not in use. This material should be stored in a dry, cool place. Store in well-ventilated areas and at moderate temperatures. Protect against physical damage. The empty container is hazardous.

## 8) Exposure Controls and Personal Protection

Ingredient	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
Sodium chloride	Not established	Not established	Not established	Not established
Sodium hydroxide	2mg/m <sup>3</sup>	Not established	2mg/m <sup>3</sup>	Not established
Sodium hypochlorite	Not established	Not established	Not established	Not established

**Engineering Controls:** Good general ventilation (typically 10 air changes/ hour) should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT

**Skin:** Wear protective gloves made of Neoprene or rubber.

**Eyes:** Wear chemical safety goggles.

**Respiratory:** If engineering controls do not maintain airborne concentrations below recommended limits, wear a NIOSH-approved respirator for dusts and mists.

**Other:** Emergency showers, eyewash stations, and fire blankets should be accessible. Wear protective clothing.

## 9) Physical and Chemical Properties

Physical State:	Liquid
Appearance:	Clear, pale yellow or green
Odor:	Chlorine
Specific Gravity:	1.2
Solubility in Water:	Complete
Boiling Point:	Not available
Freezing Point:	-3°F (-19°C)
pH (as is):	12-13
Vapor Pressure:	17.5 @ 20
Vapor Density:	Not available
Evaporation Rate:	Not available
Viscosity:	Not available
% Volatiles:	Not available

## 10) Stability and Reactivity

**Stability:** Stable

**Conditions to Avoid:** Exposure to high temperatures should be minimized.

**Incompatibility:** Combustible materials, acids, metals, amines, reducing agents.

**Decomposition:** Oxides of chlorine

**Hazardous Polymerization:** Will not occur.

## 11) Toxicological Information

---

**Immediate Effects:** May cause burns to skin and eyes. May be harmful if swallowed or inhaled.

### TOXICITY DATA

Oral, mouse, LD50: 5800mg/kg

Oral, rat, LD50: 8.91g/kg

Dermal, rabbit, LD50: >10g/kg

Inhalation, rat, 10.5mg/L

**Carcinogenicity:** No data available.

**Mutagenicity:** Mutation in microorganisms—*Salmonella typhimurium* 1mg/plate (-S9); DNA repair—*Escherichia coli* 20µg/disc; DNA damage—*Escherichia coli* 420µmol/L; phage inhibition capacity—*Escherichia coli* 103µg/well; micronucleus test—non-mammalian species multiple 120µg/L; cytogenetic analysis 0 human lymphocyte 100ppm 24 hours; sister chromatid exchange—human embryo 149mg/L; cytogenetic analysis—hamster lung 100mg/L

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductivity:** No data available.

**Neurotoxicity:** No data available.

**Other Effects:** No data available.

## 12) Ecological Information

---

**Fish Toxicity:** 94.0µg/L, 96 hours, LC50 (Mortality) Cutthroat trout (*Oncorhynchus clarki*)

**Invertebrate Toxicity:** 31.6µg/L, 7 hours, IC50 (Species Diversity) Protozoan phylum (Protozoa)

**Algal Toxicity:** 90µg/L, 96 hours LC50 (Mortality) Algae, phytoplankton, algal mat (Algae)

**Phytotoxicity:** 230µg/L, 35 hours (biomass) Curled pondweed (*Potamogeton crispus*)

**Other Toxicity:** 2.1µg/L, 2 days, (Chlorophyll) Aquatic community (Aquatic community)

**Environmental Summary:** Highly toxic to aquatic life.

## 13) Disposal Considerations

---

**RCRA Waste:** Yes

**Hazardous Waste Number:** D002 (if pH >12.5)

**VOC Content:** Not applicable.

**Waste Disposal Procedure:** Discharge, treatment, or disposal may be subject to federal, state, or local laws. State and local regulations and restrictions are complex and may differ from federal disposal regulation. The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA Classification and the proper disposal method.

## 14) Transport Information

---

### US DOT

Proper Shipping Name: Hypochlorite solutions (Sodium Hypochlorite)  
UN Identification: UN1791  
Hazard Class: 8  
Packing Group: III  
RQ: 100 lbs.

## 15) Regulations

---

**TSCA:** Yes

**SARA, Section 302—Extremely Hazardous Substances:** None listed.

**SARA, Sections 311/312—Hazard Categories:** Immediate (Acute)

**SARA, Section 313—Toxic Chemicals:** None listed.

**California Proposition 65:** This product does not contain any chemicals reportable under California Proposition 65.

**Massachusetts Substance List:** Sodium hypochlorite, asbestos

**New Jersey Substance List:** Sodium hypochlorite

**Pennsylvania Hazardous Substance:** Sodium hypochlorite

**WHMIS Classification (Canada):** Class E

**Foreign Inventory:** EINECS (European Inventory of Existing Commercial Chemical Substances), Canadian DSL (Domestic Substances List).

## 16) Other Information

---

### HMIS

Health—2  
Flammability—0  
Reactivity—1  
Personal Protection—determined by user

### NFPA

Health—2  
Flammability—0  
Reactivity—1  
Special—None

Date Issued: Thursday, February 12, 2015

Revision Date: February 12, 2015

Reason for Revision: New format, added GHS information

Revised By: Melissa Vitale, EH&S Manager

Water Tech, Inc shall not be responsible for the use of any information, product, method or apparatus herein presented ("Information"), and you must make your own determination as to its suitability and completeness for your own use, for the protection of the environment, and for health and safety purposes. You assume the entire risk of relying on this Information. In no event shall Water Tech, Inc. be responsible for damages of any nature whatsoever resulting from the use of this product or products, or reliance upon this Information. By providing this Information, Water Tech, Inc neither can nor intends to control the method or manner by which you use, handle, store, or transport Water Tech, Inc products. If any materials are mentioned that are not Water Tech, Inc. products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed. Water Tech, Inc makes no representations or warranties, either express or implied of merchantability, fitness for a particular purpose or of any other nature regarding this information, and nothing herein waives any of Water Tech, Inc.'s conditions of sale. This information could include technical inaccuracies or typographical errors. Water Tech, Inc. may make improvements and/or changes in the product (s) and/or the program (s) described in this information at any time.