



SDS #: 231

Revision Date: March 24, 2014

Saved to Your Library

## Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Chlorine Water

Signal Word  
**DANGER**

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261  
Chemtrec Emergency Phone Number: (800) 424-9604

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral, dermal, and inhalation (Category 5). May be harmful if swallowed, inhaled or in contact with skin (H303+H313+H333).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2B). Causes skin and eye irritation (H315+H320).

In addition, chlorine gas is classified as Hazard class: Acute toxicity, inhalation (Category 1). Fatal if inhaled (H330). Do not breathe gas, mist, vapors or spray (P260).



### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Hydrochloric acid	7647-01-0	HCl	36.46	1.4%
Sodium hypochlorite	7681-52-9	NaOCl	74.44	0.5%
Water	7732-18-5	H <sub>2</sub> O	18.00	98%

### SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

**If inhaled:** Remove victim to fresh air in a position comfortable for breathing (P304+P340).

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313).

**If on skin:** Rinse cautiously with water for several minutes (P353).

**If swallowed:** Do NOT induce vomiting. Rinse mouth. Give 2 - 4 cups of water or milk for dilution.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

In case of fire: Use a tri-class dry chemical fire extinguisher.

**NFPA Code**  
None established

---

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

Evacuate area. Open all windows and ventilate as much as possible. If bottle is left open all the chlorine will eventually leave the container. Absorb with sand or absorbent material and after all the chlorine is released, deposit in a sealed bag or container. See Sections 8 and 13 for further information.

---

## SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Keep container tightly closed (P233). Store in Flinn Chem-Saf™ bag and then inside Flinn Saf-Stor™ can. Use only in a hood or well-ventilated area (P271).

---

## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271). Wear respiratory protection (P284).

Exposure guidelines: (as chlorine) Ceiling 1 ppm (OSHA); TLV 0.5 ppm, STEL1 ppm (ACGIH)

---

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

0

---

## SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with organic materials (such as ether, turpentine, hydrocarbons), ammonia, and powdered metals.

Shelf life: Poor, perhaps six months at best. See Section 7 for further information.

---

## SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Very irritating to skin, eyes, and respiratory tract. ORL-RBT LD<sub>50</sub>: 900 mg/kg (as concentrated HCl)

Chronic effects: N.A.

IHL-RAT LC<sub>50</sub>: 3124 ppm/1hour (as concentrated HCl)

Target organs: N.A.

SKN-RBT LD<sub>50</sub>: greater than 10.000 mg/kg (as sodium hypochlorite)

---

## SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

---

## SECTION 13 — DISPOSAL CONSIDERATIONS

Allow the chlorine water to stand in one open container in a hood in a well-ventilated and protected area. The chlorine will leave the water in the container. The remaining water (now effectively degassed) can be rinsed down the drain.

---

## SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

---

## SECTION 15 — REGULATORY INFORMATION

Not listed.

---

## SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY

CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

**Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.**

**Revision Date:** March 24, 2014

---

© 2019 Flinn Scientific, Inc. All Rights Reserved.