

Safety Data Sheet (SDS)

11/11/2024: File reviewed, more current MSDS/SDS not available. CAS

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 the 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 ₂ 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 (P351).

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

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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 ₅₀ : 900 mg/kg (as concentrated HCl)
Chronic effects: N.A.	IHL-RAT LC ₅₀ : 3124 ppm/1hour (as concentrated HCl)
Target organs: N.A.	SKN-RBT LD ₅₀ : 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 an protected area. The chlorine will leave the water an the container. The remaining water (now effectively degassed) cone 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

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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
