

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 231.00

Revision Date: December 14, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chlorine Water

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Chlorine (7782-50-5) and Water (7732-18-5).

CAS#: None established

SECTION 3 — HAZARDS IDENTIFICATION

Light yellow aqueous solution. Pungent chlorine odor.

Toxic by inhalation and ingestion. Very irritating to mucous membranes. This is a weak solution of chlorine gas and water. Chlorine gas will slowly leave the solution.

FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-2

Exposure-3

Storage-2

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Do NOT induce vomiting. Rinse mouth. Give 2 - 4 cups of water or milk for dilution. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable liquid.

When heated to decomposition, may emit chlorine.

Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

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.

Use and dispense in a hood. Keep container tightly closed. Store in Flinn Chem-Saf Bag and then inside Flinn Saf-Stor Can.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: Ceiling 1 ppm (as chlorine) (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Water saturated with chlorine gas. Water 99+% chlorine 0.4%

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.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Very irritating.

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

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

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

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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