

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 398.00

Revision Date: November 15, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Hydrogen Peroxide (30%)

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

Hydrogen peroxide

Synonyms: hydrogen dioxide

CAS#: 7722-84-1

SECTION 3 — HAZARDS IDENTIFICATION

Clear, colorless liquid. Slightly acrid odor.

Harmful by ingestion, inhalation, or skin contact. Corrosive and severe irritant to skin, eyes, and respiratory tract. Causes severe burns. Avoid all body contact. Contact with eyes may cause blindness. 30% hydrogen peroxide will decompose rapidly when exposed to almost any substance and generate significant heat.

FLINN AT-A-GLANCE

Health-2

Flammability-0

Reactivity-3

Exposure-3

Storage-1

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

External: Wash continuously with fresh water for at least 15 minutes.

Internal: Do not induce vomiting. Give large quantities of water. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Noncombustible liquid, but a powerful oxidizer.

Strong oxidizing agent; dangerous fire and explosion risk when in contact with combustible materials.

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

Not
established.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area and ventilate area. Contain the spill with sand or other inorganic absorbent material and 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 #6. Store with bromates and chlorates. Store away from organics, combustibles, reducing agents, and strong bases.

Light sensitive. Store in a dark, vented container. Use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and 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: TWA 1 ppm (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, colorless, liquid with a slightly acrid odor.

Solubility: Soluble in water and alcohol.

Formula: H₂O₂

Formula Weight: 34.02

Boiling Point: 106 °C

Melting Point: -25 °C

pH (30%): 3.3

Specific Gravity: 1.112

Vapor density: 1.17 (Air = 1)

SECTION 10 — STABILITY AND REACTIVITY

Keep away from reducing agents, strong bases, organics, combustible material, and oxidizable materials. Avoid heating this substance.

Shelf Life: Fair to poor. Stored at room temperature, this substance decomposes at about 0.5% per year.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Corrosive to all body tissues.

Chronic effects: Dermatitis.

Target organs: N.A.

ORL-MAN LD₅₀: 1429 mg/kgIHL-RAT LC₅₀: 2000 mg/m³SKN-RAT LD₅₀: 3000 mg/kg

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

SECTION 12 — ECOLOGICAL INFORMATION

Carp LC₅₀: 42 mg/L (48 hour) Daphnia EC₅₀: 2.4 mg/L (48 hour)

SECTION 13 — DISPOSAL CONSIDERATIONS

Please consult with state and local regulations.

Flinn Suggested Disposal Method #22a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Hydrogen peroxide, aqueous solutions

Hazard Class: 5.1, Oxidizer, corrosive

UN Number: UN2014

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-765-0), RCRA code D001, D002.

SECTION 16 — OTHER INFORMATION

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