

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 398.00

Revision Date: May 29, 2009

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Hydrogen Peroxide (30%)

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

CHEMTREC Emergency Phone Number: (800) 424-9300

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### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

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Hydrogen Peroxide

Synonyms: Hydrogen Dioxide

CAS#: 7722-84-1

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### SECTION 3 — HAZARDS IDENTIFICATION

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Clear, colorless, liquid with a slight 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

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### SECTION 4 — FIRST AID MEASURES

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Call a physician, 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. Seek medical attention for further treatment.

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.

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### SECTION 5 — FIRE FIGHTING MEASURES

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Noncombustible liquid, but a powerful oxidizer.

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

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

#### NFPA CODE

Not  
established.

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Restrict unprotected personnel from area and ventilate area. Contain spill with sand or other inorganic absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

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### SECTION 7 — HANDLING AND STORAGE

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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.

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### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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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)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Clear, colorless, liquid with a slightly acid odor.  
Solubility: Soluble in water and alcohol.  
Formula: H<sub>2</sub>O<sub>2</sub>  
Formula Weight: 34.02

Specific Gravity: 1.112  
Melting Point: -25 C  
Boiling Point: 106 C  
Vapor density: 1.17  
pH (30%): 3.3

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**SECTION 10 — STABILITY AND REACTIVITY**

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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.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Corrosive to all body tissues.  
Chronic effects: Dermatitis  
Target organs: N.A.

ORL-MAN LD<sub>50</sub>: 1429 mg/kg  
IHL-RAT LC<sub>50</sub>: 2000 mg/m<sup>3</sup>  
SKN-RAT LD<sub>50</sub>: 3000 mg/kg

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Carp LC<sub>50</sub>: 42 mg/L (48 hour); Daphnia EC<sub>50</sub>: 2.4 mg/L (48 hour)

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please consult with state and local regulations.  
Flinn Suggested Disposal Method #22a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping Name: Hydrogen peroxide, aqueous solutions  
Hazard Class: 5.1, Oxidizer, corrosive  
UN Number: UN2014  
N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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

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**SECTION 16 — OTHER INFORMATION**

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