

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 839.01

Revision Date: November 20, 2001

---

### Section 1 — Chemical Product and Company Identification

---

## Universal Indicator Solution, Rainbow Acid

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

---

Proprietary mixture of acid-base indicators, <1%, Ethyl Alcohol (64-17-5) 32%, and Water (7732-18-5) 68%

CAS#: None Established

---

### Section 3 — Hazards Identification

---

The color of this solution depends on the pH of the solution. Characteristic odor of ethyl alcohol. Contains denatured ethyl alcohol. Slightly toxic by ingestion and inhalation. Body tissue irritant. Avoid all body tissue contact.

#### FLINN AT-A-GLANCE

Health-1  
Flammability-1  
Reactivity-1  
Exposure-1  
Storage-0

0 is low hazard, 3 is high hazard

---

### Section 4 — First Aid Measures

---

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 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Rinse out mouth, give 1 to 2 cups of water or milk, induce vomiting. After vomiting, give mixture of 2 Tbs. of activated charcoal mixed with one cup of water. Call a physician or poison control at once.

---

### Section 5 — Fire Fighting Measures

---

Non flammable liquid.

Contains ethyl alcohol. When heated, releases flammable fumes.

**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

None established

---

### Section 6 — Accidental Release Measures

---

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

---

### Section 7 — Handling and Storage

---

Flinn Suggested Chemical Storage Pattern: Organic #9. Store with dyes, indicators, and stains.

---

### 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 1000 ppm as ethyl alcohol (OSHA)

### Section 9 — Physical and Chemical Properties

The color of this solution depends on the pH of the solution. Characteristic odor of ethyl alcohol.

### Section 10 — Stability and Reactivity

Avoid contact with open flame, sparks or other sources of ignition.  
Shelf Life: Indefinite.

### Section 11 — Toxicological Information

Acute effects: Poison, irritant, nausea, dizziness, and headache  
Chronic effects: N.A.  
Target organs: Eyes, liver, kidneys, nerves

ORL-RAT LD50: 7060 mg/kg as ethyl alcohol  
IHL-RAT LC50: 20000 ppm/10H as ethyl alcohol  
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

Please consult with state and local regulations.  
Flinn Suggested Disposal Method 26b is one option.

### 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

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) 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. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

**FLINN SCIENTIFIC INC.**

"Your Safer Source for Science Supplies"

*Need a Chemical Fast?--  
Order from Flinn*

flinn@flinnsci.com www.flinnsci.com  
P.O. Box 219 Batavia IL 60510  
(800) 452-1261 Fax (866) 452-1436