FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

Section 1 — Chemical Product and Company Identification

Universal Indicator Solution

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

Methyl Red (845-10-3) <0.1%, Bromothymol Blue (34722-90-2) <0.1%, Phenolphthalein (77-09-8) <0.1%, Ethyl Alcohol (64-17-5) 55%, and Water (7732-18-5) 45%

CAS#: None Established

Section 3 — Hazards Identification

Section 4 — First Aid Measures

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

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

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.

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)

MSDS #: 839.00 Revision Date: February 24, 2003

> FLINN AT-A-GLANCE Health-2 Flammability-1 Reactivity-1 Exposure-1 Storage-0

0 is low hazard, 3 is high hazard

NFPA CODE

None established

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Section 9 — Physical and Chemical Properties

The color of this solution depends entirely 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.

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