

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 839.00

Revision Date: March 21, 2014

### 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

Signal Word **WARNING**

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 3). Flammable liquid and vapor (H226). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral and dermal (Category 5). May be harmful if swallowed or in contact with skin (H303+H313).

Hazard class: Serious eye damage or irritation (Category 2B). Causes eye irritation (H320).



### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

| Component Name               | CAS Number | Formula  | Formula Weight | Concentration |
|------------------------------|------------|--|----------------|---------------|
| Methyl red                   | 845-10-3   | C <sub>15</sub> H <sub>14</sub> N <sub>3</sub> O <sub>2</sub> Na | 291.28         | <0.05%        |
| Bromthymol blue, sodium salt | 34722-90-2 | C <sub>27</sub> H <sub>27</sub> Br <sub>2</sub> O <sub>3</sub> S | 646.38         | <0.05%        |
| Phenolphthalein              | 77-09-8    | NaC <sub>20</sub> H <sub>14</sub> O <sub>4</sub>                 | 318.31         | <0.05%        |
| Sodium hydroxide             | 1310-73-2  | NaOH   | 39.997         | <0.05%        |
| Ethyl alcohol, denatured     | 64-17-5    | C <sub>2</sub> H <sub>5</sub> OH                                 | 46.07          | 55%           |
| Water                        | 7732-18-5  | H <sub>2</sub> O   | 18.00          | 45%           |

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313). **If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). **If swallowed:** Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once, product contains denatured ethyl alcohol.

### SECTION 5 — FIRE FIGHTING MEASURES

Class IC flammable liquid.

Flash point: 24 °C

When heated, releases flammable fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher (P370+P378).

NFPA CODE

H-2

F-3

R-0

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert 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: Organic #9. Store with dyes, indicators and stains. Keep container tightly closed and cool (P233+P235). Use explosion-proof electrical and ventilating equipment (P241). Take precautionary measures against static discharge (P243).

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Will stain skin, clothing, and surfaces.

Exposure guidelines: (as ethyl alcohol) PEL 1000 ppm (OSHA), Ceiling 1000 ppm (ACGIH)

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

The color of this solution depends entirely on the pH of the pH indicator solution. Slight alcohol odor.

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid contact with open flame, sparks or other sources of ignition.

Shelf life: Indefinite, if stored properly.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Eye irritation, nausea, dizziness, headache.

ORL-MAN TLD<sub>0</sub>: 29 mg/kg (as phenolphthalein)

Chronic effects: Liver damage, reproductive, teratogenic effects, carcinogen.

IHL-RAT LC<sub>50</sub>: 20,000 ppm/10H (as ethyl alcohol)

SKN-RBT LD<sub>50</sub>: N.A.

Target organs: Eyes, skin, central nervous system, liver, reproductive system.

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 review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26b is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Ethyl alcohol solution. Hazard class: 3, Flammable liquid. UN number: UN1170.

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

Not listed.

---

**SECTION 16 — OTHER INFORMATION**

---

This Safety Data Sheet (SDS) 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. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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

Revision Date: March 21, 2014