

## Safety Data Sheet (SDS)

7/29/2024: File reviewed, more current MSDS/SDS not available. CAS

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**SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**


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**Universal Indicator Solution Rainbow Acid**
**Signal Word**  
**WARNING**

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

Chemtrec Emergency Phone Number: (800) 424-10462

Pictograms

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**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).

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**SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS**


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Component Name	CAS Number	Formula	Formula Weight	Concentration
Alizarin	72-48-0	C <sub>14</sub> H <sub>8</sub> O <sub>4</sub>	240.21	<0.1%>
Bromcresol green, sodium salt	62625-32-5	C <sub>21</sub> H <sub>13</sub> Br <sub>4</sub> O <sub>5</sub> SNa	720.05	0.1%
Bromphenol blue, sodium salt	34725-61-6	C <sub>19</sub> H <sub>9</sub> Br <sub>4</sub> O <sub>5</sub> SNa	691.67	0.1%
Phenol red, sodium salt	34487-61-1	C <sub>19</sub> H <sub>13</sub> NaO <sub>5</sub> S	376.36	<0.1%>
Thymol blue, sodium salt	62625-21-2	C <sub>27</sub> H <sub>29</sub> NaO <sub>5</sub> S	488.58	0.1%
Ethyl alcohol, denatured	64-17-5	C <sub>2</sub> H <sub>5</sub> OH	46.07	38%
Water	7732-18-5	H <sub>2</sub> O	18.00	62%

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**SECTION 4 — FIRST AID MEASURES**


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Call a POISON CENTER or physician if you feel unwell.

**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.

**If on skin or hair:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

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## SECTION 5 — FIRE FIGHTING MEASURES

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Class IC flammable liquid due to ethyl alcohol content.

**NFPA Code**

Flash point: 29 °C

H-1

When heated, releases flammable fumes.

F-3

In case of fire: Use a tri-class dry chemical fire extinguisher.

R-0

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## SECTION 6 — ACCIDENTAL RELEASE MEASURES

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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.

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## SECTION 7 — HANDLING AND STORAGE

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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).

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## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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

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

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## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

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The color of this solution depends on the pH of the                      pH indicator.  
solution.

Alcohol odor.

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## SECTION 10 — STABILITY AND REACTIVITY

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

Shelf life: Indefinite, if stored properly.

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## SECTION 11 — TOXICOLOGICAL INFORMATION

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Acute effects: Eye irritation, nausea, dizziness,                      ORL-RAT LD<sub>50</sub>: 7060 mg/kg (as ethyl alcohol)

headache.

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

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

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

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

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## SECTION 12 — ECOLOGICAL INFORMATION

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Data not yet available.

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## SECTION 13 — DISPOSAL CONSIDERATIONS

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

Flinn Suggested Disposal Method #26b is one option.

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## SECTION 14 — TRANSPORT INFORMATION

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Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

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## SECTION 15 — REGULATORY INFORMATION

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Not listed.

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## **SECTION 16 — OTHER INFORMATION**

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

N/A = Not applicable

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

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