Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

**Catalog Number:**
8875, U-102

**Product Identity:**
UNIVERSAL INDICATOR, BOGENS, ALCOHOLIC

**Manufacturer's Name:**
RICCA CHEMICAL COMPANY LLC

**Emergency Contact(24 hr) -- CHEMTREC®**
Domestic: 800-424-9300
International: 703-527-3887

**CAGE Code:** 4TCW6, 0V553, 4XZQ2

**Address:**
448 West Fork Dr
Arlington, TX 76012

**Telephone Number For Information:**
817-461-5601

**Date Prepared:**
3/22/06

**Revision:**
1

**Last Revised:** 12/26/2006

**Date Printed:** 09/16/2011 4:43:56 pm

Section 2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Registry #</th>
<th>Concentration</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Red</td>
<td>493-52-7</td>
<td>&lt; 0.1</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>4-Dimethylaminoazobenzene (Methyl Yellow)</td>
<td>60-11-7</td>
<td>&lt; 0.1</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Thymol Blue, Sodium Salt</td>
<td>62625-21-2</td>
<td>0.09 - 0.11</td>
<td>Not Available</td>
<td>Not Available</td>
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<tr>
<td>Isopropyl Alcohol (Isopropanol, 2-Propanol)</td>
<td>67-63-0</td>
<td>68 - 72</td>
<td>400 ppm</td>
<td>400 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>983 mg/m3</td>
<td>980 mg/m3</td>
</tr>
<tr>
<td>Bromothymol Blue</td>
<td>76-59-5</td>
<td>&lt; 0.1</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Phenolphthalein</td>
<td>77-09-8</td>
<td>&lt; 0.1</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Water, Deionized</td>
<td>7732-18-5</td>
<td>Balance</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Section 3: Hazard Identification
Emergency Overview: DANGER! Flammable. Keep away from heat, sparks, and open flames. Keep container closed. Use with adequate ventilation. Contains minute amounts of known and suspected carcinogens. Harmful if swallowed. Do not pipet by mouth. If ingested, induce vomiting until vomitus is clear. Call a physician. Wash areas of contact with plenty of water. For eyes, get medical attention.

Target Organs: eyes, skin, respiratory system, central nervous system.

Eye Contact: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva.

Inhalation: May cause irritation of the eyes, nose, throat, upper respiratory tract and associated mucosa. Exposure to high concentrations has a narcotic effect.

Skin Contact: Results in drying and cracking which can lead to secondary infections and dermatitis.

Ingestion: May cause nausea, vomiting, diarrhea and cramps. The single lethal dose for a human of Isopropanol is about 250 mL (8 oz.).

Chronic Effects/Carcinogenicity: None

IARC - 4-Dimethylaminoazobenzene (Methyl Yellow) is possibly carcinogenic to humans. Methyl Red is unclassifiable as to carcinogenicity to humans. Phenolphthalein is possibly carcinogenic to humans. Isopropyl Alcohol (Isopropanol, 2-Propanol) is unclassifiable as to carcinogenicity to humans. Methyl Red is unclassifiable as to carcinogenicity to humans. Phenolphthalein is possibly carcinogenic to humans. Isopropyl Alcohol (Isopropanol, 2-Propanol) is unclassifiable as to carcinogenicity to humans.

NTP - 4-Dimethylaminoazobenzene (Methyl Yellow) - - Substances or groups of substances, and medical treatments which may reasonably be anticipated to be carcinogens. Phenolphthalein - - Substances or groups of substances, and medical treatments which may reasonably be anticipated to be carcinogens. Phenolphthalein - - Substances or groups of substances, and medical treatments which may reasonably be anticipated to be carcinogens.


Section 4: First Aid Measures - In all cases, seek qualified evaluation.

Eye Contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Skin Contact: Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops.

Ingestion: Dilute immediately with water or milk. Induce vomiting. Call a physician.

Section 5: Fire Fighting Measures

Flash Point: App. 18°C (70%)  
LFL: 2.0% (100% IPA)  
UFL: 12.7% (100% IPA)

Extinquishing Media: Use water spray, dry chemical, alcohol foam, or carbon dioxide for extinguishing the surrounding fire. Water spray can be used to dilute spills to non-flammable mixtures.

Fire & Explosion Hazards: Vapors may explode if ignited in an enclosed area.

Fire Fighting Instructions: Vapors can flow along surfaces to distant ignition source and flash back. Use water spray to blanket fire, cool fire exposed containers, and to flush non-ignited spills or vapors away from fire.

Fire Fighting Equipment: Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Section 6: Accidental Release Measures

Remove all sources of ignition. Contain spill. Do not flush to sewer. Absorb with suitable inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal in an approved waste disposal facility. Ventilate area of spill. Have extinguishing agent available in case of fire. Use non-sparking tools and equipment. Dispose of in accordance with local regulations.

Section 7: Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Store in secure, flammable storage area away from all sources of ignition. Empty containers may be hazardous since they retain product residues.

Safety Storage Code: Flammable

Section 8: Exposure Control/Personal Protection

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.
Respiratory Protection: Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

Section 9: Physical and Chemical Properties
- Appearance: Clear, reddish-yellow liquid
- Odor: Characteristic Alcohol
- Solubility in Water: Infinite
- Specific Gravity: Approximately 0.85
- pH: Not Available.
- Boiling Point (°C): Approximately 82
- Melting Point (°C): Approximately -88
- Vapor Pressure: app. 33 at 20°C (IPA)

Section 10: Stability and Reactivity
- Chemical Stability: Stable under normal conditions of use and storage.
- Incompatibility: Strong oxidizing agents such as Nitrates, Perchlorates or Sulfuric Acid, heat, sparks, open flame. Will attack some forms of plastics, rubber and coatings. May react with metallic aluminum and generate hydrogen gas.
- Hazardous Decomposition Products: Acid and irritating fumes, including toxic oxides of carbon, when heated to decomposition.
- Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information
LD50, Oral, Rat: (Isopropanol) 5045 mg/kg, behavioral effects noted. LC50, Inhalation, Rat: (Isopropanol) 16000 ppm/8hrs. No toxic effect noted. Investigated as a tumorigen, mutagen, and reproductive effector. LD50, Oral, Rat: (Phenolphthalein) >1 gm/kg, (Methyl Yellow) 200 mg/kg. Details of toxic effects not reported other than lethal dose value.

Section 12. Ecological Information
- Ecotoxicological Information: Acute toxic effects may include the death of animals, birds, or fish, and death or low growth rate in plants. Acute effects are seen 2 to 4 days after exposure to Isopropanol. Chronic toxic effects may include shortened life span, reproductive problems, lower fertility, and changes in appearance or behavior in exposed animals. These effects can be seen long after first exposure(s) to toxic chemicals. Insufficient data are available to evaluate or predict the short and long term effects of Isopropanol to aquatic life, plants, birds, or land animals.
- Chemical Fate Information: Isopropanol is slightly persistent in water, with a half-life of between 2 to 20 days. This material is not expected to significantly bioaccumulate. When released into the soil or into water, this material is expected to quickly evaporate.

Section 13. Disposal Considerations
Do not flush to sewer. Absorb with suitable inert material (vermiculite, dry sand, earth) and place in a chemical waste container for proper disposal in an approved waste disposal facility for incineration in a chemical incinerator equipped with scrubber and afterburner. Ventilate area of spill. Have extinguishing agent available in case of fire. Eliminate all sources of ignition. Use non-sparking tools and equipment. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information
Part Numbers: 8875-16, 8875-32, 8875-4, U-102 100ML, U-102 4-LT, U-102 500ML, U-102 LT

D.O.T. Shipping Name: Isopropanol Solution
D.O.T. Hazard Class: 3
U.N. / N.A. Number: UN1219
Packing Group: II
D.O.T. Label: 3

Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)
- TSCA Status: All components of this solution are listed on the TSCA inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.
Sara Title III:

Section 302 Extremely Hazardous Substances: Not Applicable.

Section 311/312 Hazardous Categories: Acute, Chronic, Fire: Yes; Pressure, Reactivity: No

California: Contains an ingredient (4-Dimethylaminoazobenzene (Methyl Yellow)) known to the state of California to cause cancer. Contains an ingredient (Phenolphthalein) known to the state of California to cause cancer. Contains an ingredient (Phenolphthalein) known to the state of California to cause cancer.

Pennsylvania: 4-Dimethylaminoazobenzene (Methyl Yellow) is listed as both Special and Environmental Hazards on the state's Hazardous Substances List. Isopropyl Alcohol (Isopropanol, 2-Propanol) is listed as an Environmental Hazard on the state's Hazardous Substances List. Isopropyl Alcohol (Isopropanol, 2-Propanol) is listed as an Environmental Hazard on the state's Hazardous Substances List.

4-Dimethylaminoazobenzene (Methyl Yellow) is listed as both Special and Environmental Hazards on the state's Hazardous Substances List.

RCRA Status: U093, U093

CERCLA Reportable Quantity: 4-Dimethylaminoazobenzene (Methyl Yellow) - 10 pounds. 4-Dimethylaminoazobenzene (Methyl Yellow) - 10 pounds.


Section 16. Other Information

NFPA Ratings:

Health: 1  Flammability: 3  Reactivity: 0  Special Notice Key: None

HMIS Ratings:

Health: 1*  Flammability: 3  Reactivity: 0  Protective Equipment: B (Protective Eyewear, Gloves)

Rev 1, 12-26-2006: (Section 9) revised appearance from light green.

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.