

IMPORTANT MATERIAL SAFETY DATA SHEET

READ CAREFULLY BEFORE USING CHEMICAL
 OSHA requires that this form be kept on file.

Product No. KM 771 M
Product Name UNIVERSAL INDICATOR SOLUTION

Principal Hazardous Component(s)

Methyl Red	C.A.S. #493-52-7
Bromothymol Blue	C.A.S. #76-59-5
Phenolphthalein	C.A.S. #77-09-8
Ethyl Alcohol, denatured	C.A.S. #64-17-5
Water (nonhazardous)	

CHEMTREC 800-424-9300
HAZARD RATING

4-EXTREME	Health Hazard	3
3-SEVERE	Flammability	3
2-MODERATE	Reactivity	0

Chemical Synonyms	None
Formula	See Section II
C.A.S. No.	See Section II

%	P.E.L.	TLV Units
<0.01%	None Established	None Established
<0.01%	None Established	None Established
<0.01%	None Established	None Established
47+%	1000 ppm	1000 ppm
Bal.		

* chemical subject to the reporting requirements of SARA Title III.

Melting Point (°F)	N/A	Specific Gravity (H ₂ O=1)	<1
Boiling Point (°F)	N/A	Percent Volatile by Volume (%)	+99%
Vapor Pressure (mm Hg)	N/A	Evaporation Rate (..... =1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	Complete		
Appearance & Odor	Orange colored solution		

SECTION VI - PHYSICAL AND CHEMICAL PROPERTIES

Flash Point (Method Used)	51°F closed cup (95% Ethyl Alcohol)	Flammable Limits in Air % by Volume	Lower	Upper
			3.3	19.0
Extinguisher Media	Carbon dioxide, dry chemical, alcohol-type foam, water spray or universal-type foam.			

Special Firefighting Procedures
 Wear self-contained breathing apparatus and full protective clothing. Use water spray to cool fire-exposed containers. Avoid using a solid stream of water.

Unusual Fire and Explosion Hazards
 None known.

D.O.T. Denatured alcohol solution, 3, NA1987, PGII

Threshold Limit Value
 1000 ppm for Ethyl Alcohol, denatured.

9489

Effects of Overexposure
 Irritation to skin, eyes and if inhaled. Ingestion: nausea, vomiting, diarrhea, drowsine dizziness, staggering gait, weakness. Inhalation: weakness, headache, narcosis, dizziness, vomiting, nausea, drowsiness, loss of appetite, unconsciousness. Methyl red has been found to be a possible tumorigenic agent but is less than 0.1% in content.

Emergency and First Aid Procedures
 Denatured Ethyl Alcohol cannot be made non-poisonous! Call a physician.
Eye & Skin: Immediately flush with water at least 15 minutes. **Inhalation:** Remove to fresh air. **Ingestion:** Drink water and induce vomiting.

Stability	Stable <input checked="" type="checkbox"/> Unstable <input type="checkbox"/>	Conditions to Avoid	Heat, ignition sources, fire.
Incompatibility (Materials to Avoid)		Oxidizing agents.	
Hazardous Decomposition Products		Carbon Monoxide, carbon dioxide, nitrogen oxide.	
Hazardous Polymerization	May Occur <input type="checkbox"/> Will Not Occur <input checked="" type="checkbox"/>	Conditions to Avoid	N/A

SECTION VII - SPILL OR LEAK PROCEDURES
 Steps to be Taken in Case Material is Released or Spilled
 Absorb small spill with noncombustible material and containerize for proper disposal.

Waste Disposal Method
 Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities.
 Incineration in accordance with all federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	NIOSH-approved respirator in areas of high concentrations.			
Ventilation	Local Exhaust	X	Special
	Mechanical (General)	Other
Protective Gloves	Rubber gloves	Eye Protection	Safety goggles	
Other Protective Equipment	Wear protective clothing to prevent contact. Eye bath and safety shower available.			

SECTION IX - SPECIAL PRECAUTIONS
Precautions to be Taken in Handling & Storing
 Keep container tightly closed when not in use.
 Avoid breathing vapor and any contact. Keep away from heat, sparks and flame. Do not take internally.

Other Precautions
 Read label on container before using. Do not wear contact lenses when working with chemicals.
 None

Approved by Steven C. Quandt **Effective Date** 04/06/95 **For laboratory use only. Not for household use. Keep out of reach of children.**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them.