

MATERIAL SAFETY DATA SHEET

Universal Indicator Solution (pH 2-10)

SECTION 1 . Product and Company Identification

Product Name and Synonym: Universal Indicator Solution (pH 2-10)

Product Code: U3852

Material Uses:

Manufacturer: Science Stuff
1104 Newport Ave

Austin, TX 78753

(512) 837-6020

Entry Date : 7/2/2013

Print Date: 7/2/2013

24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

Health:	3
Flammability:	3
Reactivity:	0

Hazard Rating:
Least Slight Moderate High Extreme
0 1 2 3 4
NA=Not Applicable NE=Not Established

SECTION 2 HAZARD IDENTIFICATION

Keep away from heat and ignition sources. Harmful if swallowed. Avoid breathing vapors. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Bromothymol Blue	CAS# 76-59-5	0.08%	W/V	None established
<input checked="" type="checkbox"/>	Methanol (Methyl Alcohol)	CAS# 67-56-1	Balance	V/V	OSHA TWA 200 ppm, ACGIH STEL 250 ppm
<input type="checkbox"/>	Methyl Red Hydrochloride	CAS# 63451-28-5	0.04%	W/V	None Established
<input type="checkbox"/>	Phenolphthalein	CAS# 77-09-8	0.02%	W/V	TXDS: irp-rat LDLo: 500 mg/Kg
<input type="checkbox"/>	Thymol Blue	CAS# 76-61-9	0.1%	W/V	None Established

SECTION 4 FIRST AID MEASURES

Keep away from heat and ignition sources. Harmful if swallowed. Avoid breathing vapors. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

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INGESTION: If victim is conscious and alert, give 2-4 cupfuls of milk or water.
Induce vomiting by giving one teaspoon of Syrup of Ipecac.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Carbon Dioxide, dry chemical powder or appropriate foam
Fire / Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back.
Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Eliminate Ignition Sources. Absorb with vermiculite or other inert material. Place in container. If fire hazard exists, blanket spill with alcohol foam or use water spray to disperse vapors.

SECTION 7 HANDLING AND STORAGE

Use in a well ventilated area. Keep container closed when not in use. Do not get on skin in eyes or on clothing. Do not expose to temperatures above 140 deg F.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: NIOSH/MSHA-approved respirator
Ventilation
Local Exhaust
Mechanical
Protective Gloves: Wear appropriate gloves to prevent skin exposure
Eye Protection: Splash Goggles
Other Protective Equipment: Wear appropriate clothing to prevent skin exposure. Use in a well ventilated area.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	~-144 F	Percent Volatile by Volume:	>98%
Boiling Point:	~148.3 F	Evaporation Rate	2.0
Vapor Pressure:	~96.0 Hg	Evaporation Standard	Butylacetate =1
Vapor Density:	~1.11	Auto Ignition Temp	information not available
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	5.5% in air by Vol.
Appearance /Odors:	Green liquid with alcohol odor	Upper Flamm. Limit in Air	36.5% in air by Vol.
Flash Point:	~54 Deg F (Open cup)		
Specific Gravity:	~0.8		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability: Stable
Conditions to Avoid: Section 11

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Materials to Avoid: Section 11
Hazardous Decomposition Products: oxides of carbon
Hazardous polymerization: Will Not Occur
Conditions to Avoid: None known

SECTION 11 Toxicological Information

SECTION 12 Ecological Information

SECTION 13 Disposal Considerations

SECTION 14 Transport Information

DOT Classification: UN1993, Flammable Liquid, n.o.s. (Methanol), 3, PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

SECTION 16 Additional Information

Conditions to avoid/Incompatibilities: Avoid heat sparks, and open flames. Incompatible with Acids and Oxidizers. INGESTION: may be poisonous or fatal or cause blindness if swallowed. Exposure may adversely affect people with chronic disease of the central nervous system, skin, gastrointestinal tract or eyes.

Flammability

Health

Reactivity

Revisions

NFPA

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