

# MATERIAL SAFETY DATA SHEET (MSDS)

## MATERIAL SAFETY DATA SHEET

EM SCIENCE

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Manufacturer.....:**

EM SCIENCE

A Division of EM Industries

P.O. Box 70

480 Democrat Road

Gibbstown, N.J. 08027

**Preparation Date.:** 10/1/98

**Information Phone Number.:** 856-423-6300

**Hours:** Mon. to Fri. 8:30-5

**Chemtrec Emergency Number:** 800-424-9300

**Hours:** 24 hrs a day

**Catalog Number(s):**

9175

**Product Name:**

Universal Indicator Liquid pH 4-10

**Synonyms:**

None

**Chemical Family:**

Ethanollic Solution

**Formula:**

Solution

**Molecular Weight.:**

N/A

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS #	Appr %
Ethyl Alcohol	64-17-5	50-75%
Water	7732-18-5	25-50%

Also contains various dyes (less than 0.1%) that are not released by the manufacturer.

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

FLAMMABLE LIQUID AND VAPOR.

HARMFUL IF INHALED, SWALLOWED OR ABSORBED THROUGH SKIN.

May Cause Damage To Kidneys, Liver, Vascular and Nervous Systems.

**Appearance:**

Red-orange liquid, ethanol-like odor

**POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)****Symptoms of Exposure:**

Harmful if inhaled, swallowed, or absorbed through the skin. Irritating on contact with eyes or mucous membranes. Resorption of large quantities causes Central Nervous System disorders. Chronic overexposure can cause damage to gastrointestinal tract, liver, kidneys and cardiovascular system.

**Medical Cond. Aggravated by Exposure:**

Vascular and nervous system conditions,  
liver and kidney conditions.

**Routes of Entry:**

Inhalation, ingestion or skin contact.

**Carcinogenicity:**

The material is not listed (IARC, NTP, OSHA) as cancer causing agent.

**4. FIRST AID MEASURES**

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**Emergency First Aid:**

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.

Skin: Immediately flush thoroughly with large amounts of water.

Eyes: Immediately flush thoroughly with water for at least 15 minutes.

Inhalation: Remove to fresh air; give artificial respiration if breathing has stopped.

Ingestion: If conscious, drink water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

Remove contaminated clothing and wash before reuse.

**5. FIRE FIGHTING MEASURES**

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**Flash Point (F):** 74F

**Flammable Limits LEL (%):** N/A

**Flammable Limits UEL (%):** N/A

**Extinguishing Media:**

Water spray, foam, dry chemical, or CO<sub>2</sub>

**Fire Fighting Procedures:**

Wear self-contained breathing apparatus and protective clothing.

**Fire & Explosion Hazards:**

Dangerous fire hazard.

## 6. ACCIDENTAL RELEASE MEASURES

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### Spill Response:

Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under Exposure / Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Take up and containerize for proper disposal as described under Disposal. Comply with Federal, State, and local regulations on reporting releases. Refer to Regulatory Information for reportable quantity and other regulatory data.

EM SCIENCE recommends Spill-X absorbent agents for various types of spills. Additional information on the Spill-X products can be provided through the EM SCIENCE Technical Service Department (609) 423-6300. The following EM SCIENCE Spill-X absorbent is recommended for this product:

SX0863 Solvent Spill Treatment Kit

## 7. HANDLING AND STORAGE

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### Handling & Storage:

Keep container closed. Store in a cool, dry area away from ignition sources and oxidizers. Do not breath vapor or mist. Do not get in eyes, on skin, or on clothing. Electrically ground all equipment when handling this product.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:

#### Ventilation, Respiratory Protection, Protective Clothing, Eye Protection:

Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure. Material should be handled or transferred in an approved fume hood or with adequate ventilation. Protective gloves should be worn to prevent skin contact (Neoprene or equivalent) Safety glasses with side shields should be worn at all times.

### Work/Hygenic Practices:

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

## EXPOSURE GUIDELINES

### OSHA - PEL:

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
Ethyl Alcohol	1000	1900					
Water							

### ACGIH - TLV:

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	

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Ethyl Alcohol  
Water 1000 1880

If there are no exposure limit numbers listed in the Exposure Guidelines chart, this indicates that no OSHA or ACGIH exposure limits have been established.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Boiling Point (C 760 mmHg) :** N/A

**Melting Point (C) :** N/A

**Specific Gravity ( $H_2O = 1$ ) :** 0.89

**Vapor Pressure (mm Hg) :** N/A

**Percent Volatile by vol (%) :** N/A

**Vapor Density (Air = 1) :** N/A

**Evaporation Rate (BuAc = 1) :** N/A

**Solubility in Water (%) :** Soluble

**Appearance :**

Red-orange liquid, ethanol-like odor

## 10. STABILITY AND REACTIVITY

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**Stability:** Yes

**Hazardous Polymerization:**

Does not occur

**Hazardous Decomposition:**

None indicated

**Conditions to Avoid:**

Heat; contact with ignition sources.

**Materials To Avoid:**

- ( ) Water
- ( ) Acids
- ( ) Bases
- ( ) Corrosives
- (X) Oxidizers
- ( ) Other:

## 11. TOXICOLOGICAL INFORMATION

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**Toxicity Data**

None established.

**Toxicological Findings:**

None  
Listed in Registry of Toxic Effects of Chemical Substances (RTECS)

**12. DISPOSAL CONSIDERATIONS**

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EPA Waste Numbers: D001

**Treatment:**

Incineration, fuels blending or recycle. Contact your local permitted waste disposal site (TSD) for permissible treatment sites. ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

**13. TRANSPORT INFORMATION**

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**DOT Proper Shipping Name:**

Ethyl Alcohol Solution

**DOT ID Number :**

UN1170

**REGULATORY INFORMATION**

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**TSCA Statement:**

This product is a "Mixture". The CAS numbers of all components are listed on the TSCA Inventory.

Component	SARA EHS (302)	SARA EHS TPQ (lbs)	CERCLA RQ (lbs)
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Ethyl Alcohol

Water

Component	OSHA Floor List	SARA 313	DeMinimis for SARA 313 (%)
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Ethyl Alcohol

Y

Water

If there is no information listed on the regulatory information chart, this indicates that the chemical is not covered by the specific regulation listed.

## 15. OTHER INFORMATION

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### Comments:

None

### NFPA Hazard Ratings:

Health : 0  
Flammability : 3  
Reactivity : 0  
Special Hazards :

**Revision History:** 10/19/88 4/18/90 3/1/91

| = Revised Section

N/A = Not Available

N/E = None Established

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