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.: 3/26/98

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):

752X 753X

Product Name:
Acid Alcohol
Synonyms:
None
Chemical Family:
Acidic Alcohol Solution
Formula:
Solution
Molecular Weight.:
N/A

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS #	Appr %
Methanol	67-56-1	3-5%
Hydrochloric Acid	7647-01-0	3-5%
Ethyl Alcohol	64-17-5	60-95%

Product 752X also contains 27% water (CAS# 7732-18-5).
Approx. % as wt/vol

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
FLAMMABLE LIQUID AND VAPOR.
VAPOR HARMFUL.

MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED.
CANNOT BE MADE NON-POISONOUS.
May Cause Damage To Liver, Kidneys, Gastrointestinal Tract and Cardiovascular System.
IRRITATING TO SKIN, EYES AND MUCOUS MEMBRANES.

Appearance:
Clear liquid, fragrant, characteristic alcoholic odor

POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)

Symptoms of Exposure:
Can be fatal or cause blindness if swallowed in quanty. Chronic exposure (inhalation or ingestion) can cause damage to gastrointestinal tract, liver, kidneys and cardiovascular system. Causes headache, dizziness, nausea, narcosis. Contains dilute HCl. Irritating on contact with skin, eyes or mucous membranes.

Medical Cond. Aggravated by Exposure:
Impaired liver or kidney function; heart and GI 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

Emergency First Aid:
GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.
Skin: Wash thoroughly with soap and 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.

5. FIRE FIGHTING MEASURES

Flash Point (F): 57F (oc)
Flammable Limits LEL (%): 3.3
Flammable Limits UEL (%): 19
Extinguishing Media:
Dry chemical, "Alcohol" foam, CO_2, Water mist.

Fire Fighting Procedures:
Wear self-contained breathing apparatus.

Fire & Explosion Hazards:
Dangerous fire and explosive hazard. Closed containers may explode upon heating. Vapor can travel distances to ignition source and flash back.

6. ACCIDENTAL RELEASE MEASURES

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

Handling & Storage:
Keep container closed. Store in a cool 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

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 must be worn to prevent skin contact (Butyl Rubber, Viton or equivalent) Safety glasses with side shields must 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:

	TWA		STEL		CL		
Component	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	Skin
[redacted]anol	200	260	250	325			X
Hydrochloric Acid					5	7	
Ethyl Alcohol	1000	1900					

ACGIH - TLV:

Component	TWA PPM	TWA MG/M3	STEL PPM	STEL MG/M3	CL PPM	CL MG/M3	Skin
Methanol	200	262	250	328			X
Hydrochloric Acid			5	7.5	5	7.5	
Ethyl Alcohol	1000	1880					

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

9. PHYSICAL AND CHEMCIAL PROPERTIES

Boiling Point (C 760 mmHg) : 78C
Melting Point (C) : N/A
Specific Gravity (H_20 = 1) : 0.79
Vapor Pressure (mm Hg) : 40 19C
Percent Volatile by vol (%): 20%
Vapor Density (Air = 1) : 1.59
Evaporation Rate (BuAc = 1): N/A
Solubility in Water (%) : Soluble
Appearance :
Clear liquid, fragrant, characteristic alcoholic odor

|10. STABILITY AND REACTIVITY

Stability: Yes

Hazardous Polymerization:
Does not occur

Hazardous Decomposition:
CO_x, Formaldehyde, Cl

Conditions to Avoid:
Heat; contact with ignition source.

Materials To Avoid:

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

11. TOXICOLOGICAL INFORMATION

Toxicity Data

None established

Toxicological Findings:
None
Cited in Registry of Toxic Effects of Chemical Substances (RTECS)

12. DISPOSAL CONSIDERATIONS

EPA Waste Numbers: D001 D002

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

DOT Proper Shipping Name:
Ethyl Alcohol Solutions

DOT ID Number :
UN1170

14. REGULATORY INFORMATION

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)
Methanol			5000
Hydrochloric Acid	Y	500	5000
Ethyl Alcohol			

	OSHA	SARA	DeMinimis

Component	Floor List	313	for SARA 313 (%)
Methanol	Y	Y	1.0
Hydrochloric Acid	Y	Y	1.0
Ethyl Alcohol	Y		

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

Comments:
None

NFPA Hazard Ratings:

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Health          : 1
Flammability    : 3
Reactivity      : 0
Special Hazards :
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Revision History: 9/8/97

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 |  = Revised Section

N/A = Not Available

N/E = None Establised
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