

# MATERIAL SAFETY DATA SHEET



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MSDS No.: EE0070  
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## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

<b>Product</b>	Ethyl Alcohol, Denatured, Anhydrous, (200 Proof)
<b>Chemical Synonyms</b>	Ethanol
<b>Formula</b>	Mixture.
<b>Unit Size</b>	up to 20 Lt.
<b>C.A.S. No.</b>	Mixture.

	<b>CHEMTREC</b> 800-424-9300 Day 585-226-6177	<b>Health</b>	1
	<b>NFPA</b>	<b>Fire</b>	3
<b>HAZARD RATING</b>		<b>Reactivity</b>	0
MINIMAL	SLIGHT	MODERATE	SEVERE
0	1	2	3
		<b>HMIS *</b>	4

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Ethyl alcohol: (CAS No. 64-17-5)	84.35 - 87.14%	TWA: 1000 ppm
Methyl alcohol: (CAS No. 67-58-1)	3.91 - 4.73%	TWA: 200 ppm; STEL: 250 ppm
Methyl isobutyl ketone: (CAS No. 108-10-1)	0.80 - 1.05%	TWA: 50 ppm; 75 ppm
Isopropyl alcohol: (CAS No. 67-63-0)	8.15 - 9.86%	TWA: (400 ppm); STEL: (500 ppm)

**DANGER! FLAMMABLE! HARMFUL IF SWALLOWED.**

## SECTION III PHYSICAL DATA

Melting Point (°F)	-114°C (-173°F)	Specific Gravity (H <sub>2</sub> O = 1)	0.7919 - 0.7955 @ 60/60°F
Boiling Point (°F)	74-80°C (165.2-176°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	Ca 50 @ 20°C	Evaporation Rate (n-Butyl Acetate = 1)	Ca. 2
Vapor Density (Air=1)	Ca 1.5		
Solubility in Water	Complete.		
Appearance & Odor	Clear, colorless, mobile liquid; mild characteristic odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used)</b>	(5°C) 41°F	<b>Flammable Limits in Air % by Volume</b>	Lower	Upper
			4.0% (V)	20.0% (V)
<b>Extinguisher Media</b>	Water spray, carbon dioxide; dry chemical; alcohol-type, or universal-type foams.			

### SPECIAL FIREFIGHTING PROCEDURES

Wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing. Water spray may be used to keep fire exposed containers cool.

Autoignition Temperature: 400°C (752°F)

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapors formed from this product may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge, or other ignition sources at location distant from handling point. **CAUTION:** Flame may not be visible in daylight. Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials.

(2004 EMERGENCY RESPONSE GUIDEBOOK, RSPA P 5800.7, GUIDE PAGE NO. 127)

**D.O.T.** Ethanol, 3, UN1170, PG II, Ltd Qty ≤ 1 Lt.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

## SECTION V HEALTH HAZARD DATA

EE0070

**Threshold Limited Value** None established for this mixture by ACGIH 2001. See Section II.

**Effects of Overexposure** Ingestion causes dizziness, drowsiness, decreased reaction, euphoria, nausea, vomiting, staggering gait, and coma. Inhalation may cause dizziness, drowsiness, nausea and vomiting, inability to concentrate and irritation of the throat. Contact with skin causes irritation and defatting on prolonged contact. Contact with eyes may cause blindness. Target organs: Eyes, central nervous system, liver, kidneys.

**Emergency and First Aid Procedures** **INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. **EYES:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

## SECTION VI REACTIVITY DATA

<b>Stability</b>	<b>Unstable</b>	X	<b>Conditions to Avoid</b>	Heat, fire, ignition source.
	<b>Stable</b>			

**Incompatibility (Materials to Avoid)** Can react with strong oxidizers, inorganic acids and halogens.

**Hazardous Decomposition Products** Thermal decomposition or burning can produce carbon monoxide and/or carbon dioxide.

<b>Hazardous Polymerization</b>	<b>Conditions to Avoid</b>	
<b>May Occur</b>	<b>Will Not Occur</b>	Not applicable.
	X	

## SECTION VII SPILL OR LEAK PROCEDURES

**Steps to be taken in case material is released or spilled** Remove all sources of ignition, provide adequate ventilation. For small spills, dilute with water and flush to sewer with copious amounts of water or absorb on vermiculite, paper, earth or other absorbent. Burn in an approved incinerator or open pit away from buildings and people.

**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 only. Dispose of in an approved incinerator or contract with a licensed waste disposal service.

## SECTION VIII SPECIAL PROTECTION INFORMATION

**Respiration Protection (Specify Type)** For normal laboratory use at room temperatures none should be needed with adequate room ventilation. If required work in fume hood. Do not use in confined area.

<b>Ventilation</b>	<b>Local Exhaust</b>	<b>Recommended.</b>	<b>Special</b>	No.
	<b>Mechanical (General)</b>	<b>Recommended.</b>	<b>Other</b>	Adequate to maintain below exposure limits.

**Protective Gloves** Rubber. **Eye Protection** Chemical safety glasses.

**Other Protective Equipment** Smock, apron, eye wash station, goggles, fire extinguisher, proper gloves.

## SECTION IX SPECIAL PRECAUTIONS

**Precautions to be Taken in Handling & Storing** Store in a cool, dry, well-ventilated area, away from any fire hazard. Use with adequate ventilation. Do not take internally. Keep container tightly closed when not in use.

**Other Precautions** Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Wash thoroughly after handling.  
Remove and wash contaminated clothing.

Revision No. 15 | Date 01/05/07 | Approved James A. Bertsch | Chemical Safety Coordinator JAB

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