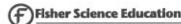
## MATERIAL SAFETY DATA SHEET



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MSDS No.: Effective Date: EE0070 January 5, 2007

#### SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE Product Ethyl Alcohol, Denatured, Anhydrous, (200 Proof) CHEMTREC Health 1 800-424-9300 Chemical Ethanol Synonyms Day 585-226-6177 Fire 3 Formula Mixture. Reactivity 0 NFPA HMIS Unit Size up to 20 Lt. HAZARD RATING MINIMAL SLIGHT MODERATE SERIOUS SEVERE C.A.S. No. Mixture. 0 2 3 4 SECTION II

Principal Component(s)	%	TLV Units
Ethyl alcohol: (CAS No. 64-17-5) Methyl alcohol: (CAS No. 67-56-1)	84.35 - 87.14% 3.91 - 4.73%	TWA: 1000 ppm TWA: 200 ppm; STEL: 250 ppn
Methyl isobutyl ketone: (CAS No. 108-10-1) Isopropyl alcohol: (CAS No. 67-63-0)		TWA: 50 ppm; 75 ppm TWA: (400 ppm);STEL: (500 ppm)

#### DANGER! FLAMMABLE! HARMFUL IF SWALLOWED.

SECTION III	PHYSICAL DAT	TA .			
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	V FIRE	FIRE AND EXPLOSION HAZARD DATA				
Flash Point		Flammable Limits in Air	Lower	Upper 20.0% (V)		
(Method Used)	(5°C) 41°F	% by Volume	4.0% (V)			
Extinguisher Media	Water spray, carbon d	ioxide; dry chemical; alcohol-type, or	universal-type foam	ıs.		

#### 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)

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

SECTION VI DEACTIVITY DATA

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.

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Stability	Unstable		Conditions to Avoid	41 -4 61 1 141		
Otability	Stable	Х		Heat, fire, ignition source.		
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.				
Hazardous Polymerization		Conditions to Avoid				
May Occu	r Will No	ot Occur		Not applicable.		
Y		v ·				

#### SPILL OR LEAK PROCEDURES **SECTION VII**

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 Protect (Specify Type)	ction						uld be needed with adequate se in confined area.
Ventilation	Loca	l Exhaust	Recommended.	ed. Specia	pecial	No.	
	Mech	nanical (General)	Recommended.	0	ther	Adequate	to maintain below exposure limits
Protective Gloves		Rubb	ber. Eye Prof		Prote	ection	Chemical safety glasses.
Other Protective	T						

# Equipment

Smock, apron, eye wash station, goggles, fire extinguisher, proper gloves.

#### SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Keep container sightly closed when not in use.

Store in a cool, dry, well-ventilated area, away from any fire hazard. Use with adequate ventilation. Do not take internally.

Other Precautions

Revision No.

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

Wash thoroughly after handling.

15 Date

Remove and wash contaminated clothing 01/05/07

Chemical Safety James A. Bertsch

JAB

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Approved