

EMS CATALOG NO: 15055  
EMS PRODUCT: Ethyl Alcohol  
DATE: 04/15/97  
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MATERIAL SAFETY DATA SHEET

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FOR PRODUCT AND SALES INFORMATION

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IDENTIFICATION

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PRODUCT NAME: Ethyl Alcohol, 200 Proof Anhydrous

SYNONYM: Ethanol, Dehydrated Alcohol

FORMULA: CH<sub>3</sub>CH<sub>2</sub>OH

CAS NUMBER: 64-17-5

UN NUMBER: 1170

DOT EMERGENCY RESPONSE GUIDE NUMBER: 26

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INGREDIENTS

% VOL: MATERIAL: CAS#: EXPOSURE LIMIT:

100 Ethanol 64-17-5 1000ppm TWA, OSHA, ACGIH

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PHYSICAL DATA

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BOILING POINT: 78.3oC / 172.9oF  
SPECIFIC GRAVITY (H2O=1): .7906 @ 20/20oC  
FREEZING POINT: ~114.1oC / ~173.4oF  
VAPOR PRESSURE: 44.6 mmHg @ 20oC  
VAPOR DENSITY (air=1): 1.6  
EVAPORATION RATE: 3.3 (Butyl acetate = 1)  
SOLUBILITY IN WATER(by wgt): 100% @20oC  
APPEARANCE: Transparent colorless.  
ODOR: Characteristic  
PHYSICAL STATE: Liquid

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#### FIRE AND EXPLOSION HAZARD DATA

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FLASHPOINT(Closed Cup): 58oF / 14oC (ASTM D56)  
(Open Cup): 70oF / 21oC (ASTM D1310)

FLAMMABLE LIQUID: UEL: 19.0  
(% vol in air) LEL 3.3

#### EXTINGUISHING MEDIA:

SMALL FIRES: Dry chemical, CO2, water spray or alcohol resistant foam.

LARGE FIRES: Water spray, fog or alcohol resistant foam.

Use water spray to cool fire exposed containers and structures.  
Use water spray to disperse vapors as reignition is possible. Use self contained breathing apparatus and protective clothing.

#### POTENTIAL HAZARDS:

Flammable material; may be ignited by heat, sparks or flames.  
Vapors may travel to a source of ignition and flash back. Container may explode in heat of fire runoff to sewer may create fire or explosion hazard.

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#### HEALTH HAZARD DATA

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EXPOSURE LIMITS: Ethanol 1000ppm, TWA, OSHA, ACGIH

#### EFFECTS OF ACUTE OVEREXPOSURE:

SWALLOWING: May cause dizziness, faintness, decreased awareness and responsiveness, nausea, vomiting and coma.

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INHALATION: High vapor concentration may cause upper respiratory tract irritation, chest pain, and coughing.

EYE CONTACT: May cause irritation, stinging and excessive redness.

#### EFFECTS OF REPEATED OVEREXPOSURE:

Repeated overexposure may result in the development of progressive liver injury with fibrosis.

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#### REACTIVITY DATA

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STABILITY: Stable

CONDITIONS TO AVOID: None known.

INCOMPATIBILITY: Strong oxidizing agents, strong inorganic acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and/or carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur.

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#### SPILL/LEAK PROCEDURES

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##### IN CASE OF SPILL:

Small spills can be flushed with large amounts of water. Larger spills should be collected for disposal. Extinguish and do not turn on any ignition source until the area is determined to be free from fire or explosion.

Dispose of spill clean up waste in compliance with Federal, State and local regulations.

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#### SPECIAL PROTECTION INFORMATION

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RESPIRATORY PROTECTION: Use self contained breathing apparatus in high vapor concentrations.

VENTILATION GENERAL: Special, local ventilation is needed where vapors escape to the workplace air.

OTHER CONTROL MEASURES: Gloves, safety glasses, eye wash, safety shower.

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#### SPECIAL PRECAUTIONS

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##### HANDLING/STORAGE PRECAUTIONS:

Keep away from heat, sparks, and flame. Avoid contact with eyes. Keep container closed. Use with adequate ventilation. Wash thoroughly

after handling.

OTHER PRECAUTIONS:

Sudden releases of hot organic chemical vapors or mists from process equipment operating at elevated.

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REGULATORY INFORMATION

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TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS: The ingredients of this product are on the TSCA inventory.

STATE RIGHT TO KNOW

CALIFORNIA PROPOSITION 65: This product contains trace levels of acetaldehyde, which the state of California has found to cause cancer.

MASSACHUSETTS: Components present in this product at a level which could require reporting under this statute are:

EXTREMELY HAZARDOUS: ACETALDEHYDE - Upper Bond Concentration 20ppm  
HAZARDOUS : ETHANOL - Upper Bond Concentration 92.4%

PENNSYLVANIA: Components in this product which could require reporting under the statute are:

HAZARDOUS: Ethanol - Upper Bond Concentration 92.4%

CALIFORNIA SCAQMD RULE 443.1 : VOC 800 g/l; Vapor Pressure 41.4mmHG @20oC.

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TRANSPORTATION

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DOT HAZARD CLASSIFICATION: Flammable Liquid

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