

Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Ethyl Alcohol, 92-94% Denatured	
NCL Catalog Number	E-30	
Product Description	Laboratory chemical	
Manufacturer	EMD Chemicals Inc.	PO Box 70, 480 Democrat Road Gibbstown, NJ 08027
Supplier	NCL of Wisconsin, Inc. Telephone: 1-800-648-7836 Email: nclabs@nclabs.com	PO Box 8, Birnamwood, WI 54414 Fax: 715-449-2454 Emergency Contact: 1-800-424-9300 (Chemtrec)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification

Flammable Liquids	Category 2
Acute Toxicity	Oral Category 4
Specific Target Organ Toxicity	Single Exposure Category 1



Signal Word

Danger

Hazard Statements

H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H370	Causes damage to organs.

Precautionary Statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe mist/vapors/spray.
P264	Wash exposed skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330	Rinse mouth.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P308+P311	IF exposed or concerned: Call a POISON CENTER or doctor.
P370+P378	In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/containers to comply with local, state and federal regulations.

Other Hazards Not Contributing to the Classification

None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity Not applicable
Common Name Not applicable

Mixture

Name	CAS #	Approximate %
Ethyl Alcohol	64-17-5	92-94
Methanol	67-56-1	≤5
Ethyl Acetate	141-78-6	≤1
4-Methyl-2-Pentanone	108-10-1	≤1

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.

If Inhaled Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor if you feel unwell.

In Case of Skin Contact Remove all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor if you feel unwell.

In Case of Eye Contact Rinse carefully with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor if you feel unwell.

If Swallowed Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell. Ingestion of large quantities: Immediately take to the hospital.

Most Important Symptoms/Effects Acute and Delayed

No additional information.

Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical attention if exposed.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable Extinguishing Media Do not use a heavy water stream.

Special Hazards Arising from the Substance or Mixture Highly flammable. Gas/vapor flammable with air within explosion limits. May be ignited by sparks. Gas/vapors spreads at floor level.

Reactivity Upon combustion: CO and CO₂ are formed. Reacts violently with many compounds; strong oxidizers. Violent to explosive reaction with some acids.

Special Protective Equipment and Precautions for Fire-Fighters Wear self-contained breathing apparatus and protective clothing. Cool tanks/drums with water spray/remove them to safety. Do not move the load if exposed to heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources.

Environmental Precautions Prevent entry to sewers and public waters. Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark and explosion proof appliances and lighting equipment. Keep containers closed. Wash contaminated clothing before reuse.

Methods and Materials for Containment and Cleaning Up

Collect spillage with inert absorbent material. Store away from other materials. Wash clothing/equipment after handling. Ensure compliance with local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE**Handling and Storage****Precautions for Safe Handling**

Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Conditions for Safe Storage Including any Incompatibilities

Keep in original container tightly closed, stored in a cool, dry, ventilated area. Store away from sunlight, which can contribute to instability. Store away from: heat sources, ignition sources, oxidizing agents, strong acids, water and moisture. Fireproof storeroom. Meet legal requirements.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**Control Parameters**

Ethyl Alcohol, Denatured (64-17-5)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1900 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

Appropriate Engineering Controls

Material should be handled or transferred in a fume hood or with equivalent ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

Individual Protection Measures

Avoid all unnecessary exposure.

Skin Protection

Protective gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye-wash fountain and quick-drench facilities in work area.

Respiratory Protection

Wear appropriate mask.

Other Information

Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Colorless
Odor	Slight alcohol odor
Odor Threshold	Not determined
pH	Not determined
Melting Point/Freezing Point	Not determined
Initial Boiling Point and Boiling Range	Not determined
Flash Point	10.556°C
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	3.3% / 19%
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	Not determined
Density	Not determined
Solubility	Soluble in water, ether, acetone, chloroform, oils/fats, methanol, and acids.
Partition Coefficient: n-octanol/water	Not determined

Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Upon combustion: CO and CO ₂ are formed. Reacts violently with many compounds. Strong oxidizers: increased risk of fire/explosion. Violent explosive reaction with some acids.
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	Extremely high or low temperatures. Heat and sunlight can contribute to instability. Open flame.
Incompatible Materials	Strong acids, strong bases, and strong oxidizers
Hazardous Decomposition Products	When heated to decomposition, can emit toxic gases, carbon dioxide, and carbon monoxide. May release flammable gases.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Harmful if swallowed.
4-Methyl-2-Pentanone (108-10-1)	
LD50 oral guinea pig	1600 mg/kg
Methanol (67-56-1)	
LD50 dermal rabbit	15800 mg/kg

Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Causes damage to organs (central nervous system, optic nerve)
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	Harmful if swallowed.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Not applicable
Persistence and Degradability	Not applicable
Bioaccumulative Potential	Not applicable
Mobility in Soil	Not applicable
Other Adverse Effects	Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations	Dispose of contents/containers in accordance with local, state federal regulations.
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Ecology-Waste Materials

Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number	UN1170
UN Shipping Name	Ethyl Alcohol
Transport Hazard Class(es)	3
Packing Group	II
Environmental Hazards	Not applicable
Transport in Bulk	Not applicable
Special Precautions	Not applicable

SECTION 15: REGULATORY INFORMATION

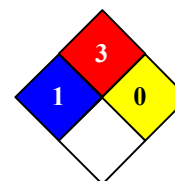
Ethyl Alcohol (64-17-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Methanol (67-56-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Ethyl Acetate (141-78-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
4-Methyl-2-Pentanone (108-10-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: OTHER INFORMATION

Revision Date: 04/14/2015

NFPA Hazards

Health Hazard	1: Exposure would cause irritation with only minor residual injury.
Fire Hazard	3: Liquids and solids that can be ignited under almost all ambient temperature conditions.
Reactivity/Instability	0: Normally stable, even under fire exposure conditions, and is not reactive with water.



HMIS III Rating

Health	1: Irritation or minor reversible injury possible.
Flammability	3: Materials capable of ignition under almost all normal temperature conditions.
Physical Hazard	0: Materials that are normally stable, even under fire conditions.
Personal Protection	H

E-30	
Health	1
Flammability	3
Physical Hazard	0
Personal Protection	H

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END OF SAFETY DATA SHEET