SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Denatured Ethanol 140 Proof
CAS number	64-17-5
Synonyms	Denatured Ethyl Alcohol; Reagent Alcohol

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable Liquids	Category 2
Eye Irritation	Category 2A
Specific Target Organ Toxicity - single exposure	Category 2
Target Organ(s) - Eyes, Central nervous system	

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	Highly flammable liquid and vapor. Causes serious eye irritation. May cause damage to organs.
Precautionary statements	Prevention: Avoid breathing mist/vapors/spray. Do not breathe mist/vapors/spray. Do not eat, drink, or smoke when using this product. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Take precautionary measures against the static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection. Response: If exposed or concerned: Call a poison center/doctor. Call a poison center/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several mintues. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of water. If skin irritation occurs: Get medical attention. Wash contaminated clothing before re-use. Fire: In case of fire, use water spray or fog, carbon dioxide, dry chemical powder, or alcohol resistant foam to extinguish. Storage: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Ethanol	Ethyl alcohol	64-17-5	63.3%
Methanol	Methyl alcohol	67-56-1	3.2%
2-Propanol	Isopropyl alcohol	67-63-0	3.5%
Water	Aqua; H2O	7732-18-5	30%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled If symptoms are experienced, remove source of contamination or move victim to fresh air. If affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

In case of skin contact If irritation is experienced, flush with water. If irritation persists, get medical attention.

In case of eye contact Immediately flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, get medical attention.

If swallowed Do not induce vomiting. If the material is swallowed, get medical attention or advice.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water fog, alcohol-resistant foam, dry chemical powder, Carbon dioxide (CO2).

Unsuitable extinguishing media For this substance/mixture, no limitations of extinguishing agents are given.

5.2 Specific hazards arising from the substance or mixture

Combustible. Pay attention to flashback. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.
Hazardous Combustion Products: Carbon oxides.

5.3 Special protective equipment and precautions for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Flash Point 9.7 °C at 1013 hPa

Autoignition Temperature 455 °C

Explosion limits

Upper 13.50%
Lower 2.50%

Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	3	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapors, aerosols. Avoid contact with substance. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Take up carefully with liquid-absorbent material. Dispose of properly. Clean up affected area.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements. See Section 13 for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling
Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces, and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Moisture sensitive. Handle and store under inert gas.

Incompatibilities
Aluminum, Acids, Oxidizing agents, Alkali metals, Halogenated compounds, Ammonia, Acid chlorides, Acid anhydrides, Reducing agents, Peroxides.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Ethyl alcohol	(Vacated) TWA	1000 ppm 1900 mg/m3
Methyl alcohol	(Vacated) TWA	200 ppm 260 mg/m3
	(Vacated) STEL	250 ppm 325 mg/m3
Isopropyl alcohol	(Vacated) TWA	400 ppm 980 mg/m3
	(Vacated) STEL	500 ppm 1225 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Ethyl alcohol	STEL	1000 ppm
Methyl alcohol	TWA	200 ppm
	STEL	250 ppm
Isopropyl alcohol	TWA	200 ppm
	STEL	400 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Ethyl alcohol	IDLH	3300 ppm
	TWA	1000 ppm 1900 mg/m3
Methyl alcohol	IDLH	6000 ppm
	TWA	200 ppm 260 mg/m3
	STEL	250 ppm 325 mg/m3
Isopropyl alcohol	IDLH	2000 ppm
	TWA	400 ppm 980 mg/m3

	STEL	500 ppm	1225 mg/m3

Biological occupational exposure limits
No information available.

8.2 Exposure controls

Appropriate engineering controls
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal protective equipment

Eye/face protection
Safety glasses with side shields are recommended as minimum protection in industrial settings.

Skin protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection
Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Control of environmental exposure
Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Sweet, Alcohol-like
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No information available
Boiling Point/Range	(64.7 °C) at 1013 hPa
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	
Upper	13.50%

Lower	2.50%
Vapor Pressure	169.3 hPa at 25 °C
Vapor Density	No information available
Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	455 °C
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	C2H6O
Molecular Weight	46.07 g/mol
VOC Content(%)	No information available
Oxidizing properties	Not oxidizing

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapors may form explosive mixture with air.

10.2 Chemical stability

Reacts with air to form peroxides. The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Aluminum, Acids, Oxidizing agents, Alkali metals, Halogenated compounds, Ammonia, Acid chlorides, Acid anhydrides, Reducing agents, Peroxides.

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethyl alcohol	10470 mg/kg (Rat) 3450 mg/kg (Mouse)	-	117-125 mg/L 4h (Rat) 20000 ppm/10H (Rat)
Methyl alcohol	1187-2769 mg/kg (Rat)	17100 mg/kg (Rabbit)	128.2 mg/L 4h (Rat)
Isopropyl alcohol	5045 mg/kg (Rat) 3600 mg/kg (Mouse)	12800 mg/kg (Rat)	72.6 mg/L 4h (Rat)

Skin corrosion/irritation
Contact may cause dry skin.

Serious eye damage/eye irritation
Irritating to eyes.

Respiratory or skin sensitization
Irritating to respiratory system.

Germ cell mutagenicity
No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Ethyl alcohol	64-17-5	Not listed	Not listed	Not listed	Not listed	Not listed
Methyl alcohol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed
Isopropyl alcohol	67-63-0	Not listed	Not listed	Not listed	Not listed	Not listed
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

When consumed, ethyl alcohol can target the respiratory system, skin, eyes, CNS, liver, blood, and reproductive system.
Methanol: Eyes, CNS, GI tract, and respiratory system.
Isopropyl alcohol: skin, eyes, CNS, and respiratory system.

Specific target organ toxicity - repeated exposure
No information available.

Reproductive toxicity
No information available.

Chronic effects
Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea, and vomiting. May cause blindness.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results
Ethanol	LC50	Pimephales promelas	15,300 mg/L, 96h, flow-through
	LC50	Ceriodaphnia dubia	5,012 mg/L, 48h, static
	EC50	Chlorella vulgaris	275 mg/L, 72h, static
	IC50	Activated sludge	> 1,000 mg/L, 3h, static
	NOEC	Danio rerio	250 mg/L 120h, semi-static
	NOEC	Daphnia magna	9.6 mg/L, 9d, semi-static
Methanol	LC50	Lepomis macrochirus	15,400.0 mg/L, 96h, flow-through
	EC50	Daphnia magna	18,260 mg/L, 96h, semi-static
	EC50	Pseudokirchneriella	ca. 22,000.0 mg/L, 96h, static
	IC50	Activated sludge	> 1,000 mg/L, 3h, static
	NOEC	Oryzias latipes	7,900 mg/L, 200h
2-Propanol	LC50	Pimephales promelas	9,640 mg/L, 96h, flow-through
	EC50	Daphnia magna	13,299 mg/L, 48h
	IC50	Desmodesmus subspicatus	> 1,000 mg/L, 72h
	EC50	Pseudomonas putida	1,050 mg/L, 16h

12.2 Persistence and degradability
The relevant substances of the mixture are readily biodegradable.

12.3 Bio accumulative potential
No information available.

12.4 Mobility in soil
No information available.

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Endocrine disrupting properties
No information available.

12.7 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Methanol - 67-56-1	U154	-

SECTION 14: Transport information

DOT (US)

UN-no	UN1987
Proper Shipping Name	Alcohols, n.o.s.
Hazard Class	3
Packing Group	II

IMDG

UN-no	UN1987
Proper Shipping Name	Alcohols, n.o.s.
Hazard Class	3
Packing Group	II

IATA

UN-no	UN1987
Proper Shipping Name	Alcohols, n.o.s.
Hazard Class	3
Packing Group	II

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed, Methyl alcohol (CAS #67-56-1), RQ: 5000 lb.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not applicable.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Fire Hazard, Acute Health Hazard, Chronic Health Hazard.

SARA 313 (TRI reporting)

Listed, Methyl alcohol (CAS #67-56-1).
Listed, Isopropyl alcohol (CAS #67-63-0).

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Listed, Methyl alcohol (CAS #67-56-1).

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Listed, Ethyl alcohol (CAS #64-17-5).
Listed, Isopropyl alcohol (CAS #67-63-0).

US state regulations

US. Massachusetts RTK - Substance List

Listed, Ethyl alcohol (CAS #64-17-5).
Listed, Methyl alcohol (CAS #67-56-1).
Listed, Isopropyl alcohol (CAS #67-63-0).

US. New Jersey Worker and Community Right-to-Know Act

Listed, Ethyl alcohol (CAS #64-17-5).
Listed, Methyl alcohol (CAS #67-56-1).
Listed, Isopropyl alcohol (CAS #67-63-0).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Ethyl alcohol (CAS #64-17-5).
Listed, Methyl alcohol (CAS #67-56-1).
Listed, Isopropyl alcohol (CAS #67-63-0).

California Proposition 65

Listed, Ethyl alcohol (CAS #64-17-5).
Listed, Methyl alcohol (CAS #67-56-1).

SECTION 16: Other information

Issue date: 04/13/2023
Revised on 05/19/2026

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.