



## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name	Ethanol 200 Proof (100%) Denatured Alcohol
CAS number	64-17-5
Synonyms	Ethyl 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

<b>Emergency Phone #</b>	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)  
Serious Eye Damage/Eye irritation (Category 2)

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Highly flammable liquid and vapor  
Causes serious eye irritation

Precautionary statements

Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection  
Do not breathe dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool  
IF exposed or concerned: Get medical attention/advice  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
In case of fire: Use CO2, dry chemical, or foam for extinction  
Store locked up  
Store in a well-ventilated place. Keep container tightly closed  
Dispose of contents/container to an approved waste disposal plant

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

None.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Ethyl Alcohol	Ethanol	64-17-5	89.67-90.03%
Isopropyl Alcohol	Isopropanol, 2-propanol, IPA	67-63-0	9.03-9.39%
Methyl Isobutyl Ketone	4-methylpentan-2-one, MIBK	108-10-1	0.92-0.96%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

## General advice

- If inhaled** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
- In case of skin contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
- In case of eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
- If swallowed** Clean mouth with water and drink afterwards plenty of water.

### 4.2 Most important symptoms and effects, both acute and delayed

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

### 4.3 Indication of any immediate medical attention and special treatment needed

Note to Physician: Treat Symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.
- Unsuitable extinguishing media** Water may be ineffective, Do not use a solid water stream as it may scatter and spread fire.

### 5.2 Specific hazards arising from the substance or mixture

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 5.4 Further information

- Flash Point** 14 °C / 57 °F
- Autoignition Temperature** No information available.

## Explosion limits

**Upper** No information available.

**Lower** No information available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

## NFPA

Health	Flammability	Instability	Physical hazards
2	3	1	N/A

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

### 6.2 Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

### 6.4 Reference to other sections

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

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Flammable area. Keep away from heat, sparks, and flame.

## Incompatibilities

Strong oxidizing agents. Strong acids. Acid anhydrides. Acid chlorides.

## 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	TWA	1900 mg/m <sup>3</sup> 1000 ppm
Isopropyl Alcohol	TWA	980 mg/m <sup>3</sup> 400 ppm
Methyl Isobutyl Ketone	TWA	410 mg/m <sup>3</sup> 100 ppm

#### US. ACGIH Threshold Limit Values

Component	Type	Value
Ethyl Alcohol	STEL	1000 ppm
Isopropyl Alcohol	TWA	200 ppm
	STEL	400 ppm
Methyl Isobutyl Ketone	TWA	20 ppm
	STEL	75 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Ethyl Alcohol	IDLH	3300 ppm
	TWA	1900 mg/m <sup>3</sup> 1000 ppm
Isopropyl Alcohol	ST	1225 mg/m <sup>3</sup> 480 ppm
	TWA	980 mg/m <sup>3</sup> 400 ppm
Methyl Isobutyl Ketone	ST	300 mg/m <sup>3</sup> 75 ppm
	TWA	205 mg/m <sup>3</sup> 50 ppm

#### Biological occupational exposure limits

No information available.

### 8.2 Exposure controls

#### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal protective equipment

##### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

##### Skin protection

Wear appropriate protective gloves.

### **Body Protection**

Wear appropriate clothing.

### **Respiratory protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### **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	Alcohol
Odor Threshold	No information available.
pH	No information available.
Melting Point/Range	No information available.
Boiling Point/Range	No information available.
Evaporation Rate	No information available.
Flammability (solid)	Not applicable.
Flammability or explosive limit	
Upper	No information available.
Lower	No information available.
Vapor Pressure	No information available.
Vapor Density	No information available.
Density	No information available.
Solubility	No information available.
Partition coefficient; n-octanol/water	No information available.
Autoignition Temp	No information available.
Decomposition Temp	No information available.
Viscosity	No information available.
Molecular Formula	C <sub>2</sub> H <sub>6</sub> O
Molecular Weight	46.07
VOC Content(%)	No information available.
Oxidizing properties	None.

### **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

None under normal processing.

## 10.4 Conditions to avoid

Incompatible products. Heat, flames and sparks. Keep away from open flames, hot surfaces and sources of ignition.

## 10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Acid anhydrides, Acid chlorides.

## 10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

## 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	No information available	117-125 mg/L
Isopropyl Alcohol	5045 mg/kg (rat)	12800 mg/kg (rat)	72.6 mg/L (rat)
Methyl Isobutyl Ketone	2080 mg/kg (rat)	No information available	11.6 mg/L (rat)

##### Skin corrosion/irritation

No information available.

##### Serious eye damage/eye irritation

Irritating to eyes.

##### Respiratory or skin sensitization

No information available.

##### Germ cell mutagenicity

No information available.

##### Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
-----------	-----	------	-----	-------	------	--------

Ethyl Alcohol	64-17-5	Not listed	Known	A3	Not listed	A3
Isopropyl Alcohol	67-63-0	Not listed	Not listed	Not listed	Not listed	Not listed
Methyl Isobutyl Ketone	108-10-1	Group 2B	Not listed	A3	Listed	A3

#### Specific target organ toxicity - single exposure

No information available.

#### Specific target organ toxicity - repeated exposure

No information available.

#### Reproductive toxicity

No information available.

#### Chronic effects

No information available.

### 11.2 Additional Information

The toxicological properties have not been fully investigated.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product		Species	Test Results	
Ethyl Alcohol	EC50	Chlorella vulgaris	275 mg/L	72 h
	LC50	Pimephales promelas	14200 mg/L	96 h
	EC50	Photobacterium phosphoreum	34634 mg/L	30 min
	EC50	Photobacterium phosphoreum	35470 mg/L	5 min
	EC50	Water flea	9268 mg/L	48 h
	EC50	Water flea	10800 mg/L	24 h
Isopropyl Alcohol	EC50	Desmodesmus subspicatus	> 1000 mg/L	96 h
	LC50	Pimephales promelas	9640 mg/L	96 h
	EC50	Photobacterium phosphoreum	35390 mg/L	5 min
	EC50	Water flea	13299 mg/L	48 h
Methyl Isobutyl Ketone	EC50	Freshwater algae	400 mg/L	96 h
	LC50	Pimephales promelas	496-514 mg/L	96 h
	EC50	Microtox	79.6 mg/L	5 min
	EC50	Water flea	4280 mg/L	24 h

### 12.2 Persistence and degradability

Persistence is unlikely based on information available.

### 12.3 Bio accumulative potential

No information available.

### 12.4 Mobility in soil



Will likely be mobile in the environment due to its volatility.

### 12.5 Results of PBT and vPvB assessment

No information available.

### 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.

## SECTION 14: Transport information

### DOT (US)

UN-no	UN1987
Proper Shipping Name	Alcohols, n.o.s (ethanol, isopropanol, methyl isobutyl ketone)
Hazard Class	3
Packing Group	II

### IMDG

UN-no	UN1987
Proper Shipping Name	Alcohols, n.o.s (ethanol, isopropanol, methyl isobutyl ketone)
Hazard Class	3
Packing Group	II

### IATA

UN-no	UN1987
Proper Shipping Name	Alcohols, n.o.s (ethanol, isopropanol, methyl isobutyl ketone)
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 listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Listed. Component: Methyl Isobutyl Ketone; RQ 5000 lb

**SARA 304 Emergency release notification**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

Listed. Components: Ethyl Alcohol, Isopropyl Alcohol, Methyl Isobutyl Ketone

**SARA 313 (TRI reporting)**

Regulated. Component: Methyl Isobutyl ketone; Weight: > 95%; Threshold Value: 0.1%

**Other federal regulations**

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

Regulated. Component: Methyl Isobutyl Ketone

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

Regulated. Component: Methyl Isobutyl Ketone

**Safe Drinking Water Act**

Not regulated.

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

Not listed.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed. Components: Ethyl Alcohol, Isopropyl Alcohol, Methyl Isobutyl Ketone

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

Listed. Components: Ethyl Alcohol, Isopropyl Alcohol, Methyl Isobutyl Ketone

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

Listed. Components: Ethyl Alcohol, Isopropyl Alcohol, Methyl Isobutyl Ketone

**California Proposition 65**

Listed. Component: Methyl Isobutyl Ketone

**SECTION 16: Other information**

Issue date: 09/16/2024

## **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.