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 with Isopropanol & MIBK
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
E-mail	customerservice@laballey.com

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)
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

Warning. Cancer - https://www.p65warnings.ca.gov/

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 (CO2), 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 data available.
Lower No data 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

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/m3; 1000 ppm
Isopropyl Alcohol	TWA	980 mg/m3; 400 ppm
Methyl Isobutyl Ketone	TWA	410 mg/m3; 100 ppm

US. ACGIH Threshold Limit Values

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

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Ethyl Alcohol	IDLH TWA	3300 ppm 1900 mg/m3; 1000 ppm
Isopropyl Alcohol	STEL TWA	1225 mg/m3; 480 ppm 980 mg/m3; 400 ppm
Methyl Isobutyl Ketone	STEL TWA	300 mg/m3; 75 ppm 205 mg/m3; 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	C2H6O

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 (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	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	Not 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

Isopropyl Alcohol	EC50	Photobacterium phosphoreum	35470 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 Number	UN1987
Proper Shipping name	Alcohols, n.o.s (ethanol, isopropanol, methyl isobutyl ketone)
Hazard Class	3
Packaging Group	II

IMDG

UN Number	UN1987
Proper Shipping name	Alcohols, n.o.s (ethanol, isopropanol, methyl isobutyl ketone)
Hazard Class	3

Packaging Group	II

IATA

UN Number	UN1987
Proper Shipping name	Alcohols, n.o.s (ethanol, isopropanol, methyl isobutyl ketone)
Hazard Class	3
Packaging 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

Methyl Isobutyl Ketone (#108-10-1) is listed as a cancer and developmental hazard.

SECTION 16: Other information

Date of Issue: 9/16/2024
Revision Date: 11/13/2026

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.