

This SDS complies with the US OSHA HCS 2012.

1. Product and Company Identification

Product Code: ETHSOLU
Product Name: Ethanol Solution 90-100%
Company Name: CalibreScientific US, Inc. **Phone Number:** 1 (360)260-2779
 1311 SE Cardinal Ct Suite 170
 Vancouver, WA 98683
Web site address: Alphatecsystems.com
Email address: Regulatory@calibrescientific.com
Emergency Contact: INFOTRAC
 International 00-1- (352)323-3500
Information: North America 1 (800)535-5053
Intended Use: For Laboratory Use Only
Product List Ethanol Solution, Product Code: 0003303, 0004404, 0004210, 0003356, 0004213, 0003125, 0004627, 0004627S.

2. Hazards Identification

Flammable Liquids, Category 2
Acute Toxicity: Inhalation, Category 4
Acute Toxicity: Oral, Category 4
Specific Target Organ Toxicity (single exposure), Category 1



GHS Signal Word: **Danger**

GHS Hazard Phrases: H225 - Highly flammable liquid and vapor.
 H302 - Harmful if swallowed.
 H332 - Harmful if inhaled.
 H370 - Causes damage to organs

GHS Precautionary Phrases: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P233 - Keep container tightly closed.
 P240 - Ground/bond container and receiving equipment.
 P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment.
 P242 - Use only non-sparking tools.
 P243 - Take precautionary measures against static discharge.
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
 P264 - Wash hands thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P271 - Use only outdoors or in a well-ventilated area.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases: P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P308+311 - If exposed or concerned: Call a POISON CENTER/Doctor/...
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P330 - Rinse mouth.
 P370+378 - In case of fire, use CO2 carbon dioxide or alcohol resistant foam to

GHS Storage and Disposal Phrases:	extinguish. P403+235 - Store in cool/well-ventilated place. P405 - Store locked up. P501 - Dispose of contents/container to safe area according to state and local guidelines.
Inhalation:	Causes respiratory tract irritation. May be harmful if inhaled.
Skin Contact:	Causes skin irritation. May be harmful if absorbed through the skin.
Eye Contact:	Causes eye irritation.
Ingestion:	Harmful if swallowed. May cause irritation of the digestive tract.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
64-17-5	Ethyl alcohol {Ethanol}	76.5 -95.0 %
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	1.8 -6.0 %
67-63-0	Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol}	1.8 -6.0 %

4. First Aid Measures

Emergency and First Aid Procedures:	
In Case of Inhalation:	Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
In Case of Skin Contact:	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
In Case of Eye Contact:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
In Case of Ingestion:	Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Note to Physician:	Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Point:	11.70 C Method Used: Estimate
Explosive Limits:	LEL: No data. UEL: No data.
Autoignition Pt:	> 350.00 C
Suitable Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Fire Fighting Instructions:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Flammable Properties and Hazards:	No data available.
Hazardous Combustion Products:	No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

7. Handling and Storage

Precautions To Be Taken in Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Precautions To Be Taken in Storing: Store in a cool, dry place. Store in a tightly closed container.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
64-17-5	Ethyl alcohol {Ethanol}	PEL: 1000 ppm	TLV: 1000 ppm	No data.
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	PEL: 200 ppm	TLV: 200 ppm STEL: 250 ppm	No data.
67-63-0	Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol}	PEL: 400 ppm	TLV: 200 ppm STEL: 400 ppm	No data.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Eye 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.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

9. Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Colorless/Clear. Ethanol odor.

pH: No data.

Melting Point: -114.10 C - -88.00 C

Boiling Point: 64.70 C - 82.00 C / 0.0 mm Hg

Flash Point: 11.70 C Estimate

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure: No data.

Vapor Density (vs. Air=1): No data.

Specific Gravity (Water=1): No data.

Density: ~ 0.7910 G/CM3

Solubility in Water: No data.

Saturated Vapor Concentration:	No data.
Octanol/Water Partition Coefficient:	No data.
Autoignition Pt:	> 350.00 C
Decomposition Temperature:	No data.
Viscosity:	No data.

10. Stability and Reactivity

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Incompatible materials, dust generation.
Incompatibility - Materials To Avoid:	Strong oxidizing agents.
Hazardous Decomposition or Byproducts:	Carbon monoxide.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:	Epidemiology: No information found. Teratogenicity: No information available. Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies:
Carcinogenicity/Other Information:	CAS# 1521-38-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information:	Environmental: No information available. Physical: No information available. Other: Do not empty into drains.
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13. Disposal Considerations

Waste Disposal Method:	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed.
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14. Transport Information

GHS Classification:	Flammable Liquids, Category 2 - Danger! Highly flammable liquid and vapor Acute Toxicity: Inhalation, Category 4 - Warning! Harmful if inhaled Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed
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Specific Target Organ Toxicity (single exposure), Category 1 - Danger! Causes damage to organs {<target organs>}

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Alcohols, n.o.s. (Ethanol)
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN1987 **Packing Group:** II



LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Alcohols, n.o.s. (Ethanol)
UN Number: UN1987 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID **TDG Classification:**

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Alcohols, n.o.s. (Ethanol)
UN Number: UN1987 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Alcohols, n.o.s. (Ethanol)
UN Number: UN1987 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

15. Regulatory Information

16. Other Information

Revision Date: 03/07/2025 **Previous revision:** 02/01/2023
Preparer Name: A. Frontella

Additional Information About This Product: No data available.

Document & Change Control Number: SDS0141.E.

Company Policy or Disclaimer: Disclaimer
 The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.