

**1. Product and Company Identification**

**Product Code:** 0003350  
**Product Name:** Acid-Ethanol 90%  
**Company Name:** Alpha-Tec Systems, Inc. **Phone Number:**  
 1311 SE Cardinal Ct Suite 170 1 (360)260-2779  
 Vancouver, WA 98683  
**Web site address:** Alphatecsystems.com  
**Email address:** Regulatory@Alphatecsystems.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** Acid-Ethanol 90%, Product Code Also Applies to: 0004406, 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**  
**Skin Corrosion/Irritation, Category 3**



**GHS Signal Word:** **Danger**  
**GHS Hazard Phrases:** H225 - Highly flammable liquid and vapor.  
 H302 - Harmful if swallowed.  
 H316 - Causes mild skin irritation.  
 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.  
 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.

<b>GHS Storage and Disposal Phrases:</b>	P330 - Rinse mouth. P332+313 - If skin irritation occurs, get medical advice/attention. P370+378 - In case of fire, use use CO@ carbon dioxide or alcohol resistant foam to 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.
<b>Inhalation:</b>	Causes respiratory tract irritation. May be harmful if inhaled.
<b>Skin Contact:</b>	Causes skin irritation. May be harmful if absorbed through the skin.
<b>Eye Contact:</b>	Causes eye irritation.
<b>Ingestion:</b>	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}	76.16 -85.12 %
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	1.792 -5.376 %
67-63-0	Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol}	1.792 -5.376 %
64-19-7	Acetic acid {Ethanoic acid, Vinegar}	0.1 -0.5 %

### 4. First Aid Measures

**Emergency and First Aid**
**Procedures:**

<b>In Case of Inhalation:</b>	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.
<b>In Case of Skin Contact:</b>	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
<b>In Case of Eye Contact:</b>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
<b>In Case of Ingestion:</b>	Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
<b>Note to Physician:</b>	Treat symptomatically and supportively.

### 5. Fire Fighting Measures

<b>Flash Pt:</b>	11.70 C	Method Used: Estimate
<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.
<b>Autoignition Pt:</b>	> 350.00 C	
<b>Suitable Extinguishing Media:</b>	Use water spray, dry chemical, carbon dioxide, or appropriate foam.	
<b>Fire Fighting Instructions:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.	
<b>Flammable Properties and Hazards:</b>	No data available.	
<b>Hazardous Combustion Products:</b>	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.
64-19-7	Acetic acid {Ethanoic acid, Vinegar}	PEL: 10 ppm	TLV: 10 ppm STEL: 15 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  Liquid  Solid

**Appearance and Odor:** Colorless/Clear. alcohol-like.

**pH:** No data.

**Melting Point:** -114.10 C - -88.00 C

**Boiling Point:** 64.70 C - 82.00 C

**Flash Pt:** 11.70 C Method Used: Estimate

**Evaporation Rate:** No data.

**Flammability (solid, gas):** No data available.

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

**Vapor Pressure (vs. Air or mm Hg):** No data.

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

<b>Specific Gravity (Water = 1):</b>	No data.
<b>Density:</b>	~ 0.7910 G/CM3
<b>Solubility in Water:</b>	No data.
<b>Saturated Vapor Concentration:</b>	No data.
<b>Octanol/Water Partition Coefficient:</b>	No data.
<b>Autoignition Pt:</b>	> 350.00 C
<b>Decomposition Temperature:</b>	No data.
<b>Viscosity:</b>	No data.

Information with regard to primary physical hazard:

### 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ <input type="checkbox"/> ]    Stable [ <input checked="" type="checkbox"/> ]
<b>Conditions To Avoid - Instability:</b>	Incompatible materials, dust generation.
<b>Incompatibility - Materials To Avoid:</b>	Strong oxidizing agents.
<b>Hazardous Decomposition or Byproducts:</b>	Carbon monoxide.
<b>Possibility of Hazardous Reactions:</b>	Will occur [ <input type="checkbox"/> ]    Will not occur [ <input checked="" type="checkbox"/> ]
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.

### 11. Toxicological Information

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

### 12. Ecological Information

<b>General Ecological Information:</b>	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.

### 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  
 Specific Target Organ Toxicity (single exposure), Category 1 - Danger! Causes damage to organs {<target organs>}  
 Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation

**LAND TRANSPORT (US DOT):**

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



**LAND TRANSPORT (Canadian TDG):**

**TDG Shipping Name:** Alcohols, n.o.s.  
**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.  
**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

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

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
64-17-5	Ethyl alcohol {Ethanol}	No	No	No
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	No	Yes NA	Yes
67-63-0	Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol}	No	No	Yes
64-19-7	Acetic acid {Ethanoic acid, Vinegar}	No	Yes NA	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
64-17-5	Ethyl alcohol {Ethanol}	CA PROP.65: No; MA Oil/HazMat: Yes; NJ EHS: No; PA HSL: Yes - 1
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	CA PROP.65: Yes: RDTox.; MA Oil/HazMat: Yes; NJ EHS: Yes - 1222; PA HSL: Yes - E
67-63-0	Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol}	CA PROP.65: No; MA Oil/HazMat: No; NJ EHS: Yes - 1076; PA HSL: Yes - E
64-19-7	Acetic acid {Ethanoic acid, Vinegar}	CA PROP.65: No; MA Oil/HazMat: Yes; NJ EHS: No; PA HSL: Yes - E

### 16. Other Information

**Revision Date:** 06/20/2023      **Previous revision:** 12/28/2016

**Preparer Name:** Tim Meehan

**Additional Information About This Product:** No data available.

**Document & Change Control Number** SDS0158.D.1.

**Company Policy or Disclaimer:** Disclaimer

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