



# SAFETY DATA SHEET

## 1. Identification

**PRODUCT NAME:** ALPHA HANDRUB LIQUID (NPN 80097946)  
**PRODUCT CODE:** ACL0005  
**PRODUCT APPLICATION:** Hand Sanitizer  
**COMPANY'S NAME:** Alpha Cleantech Labs Inc.  
**TELEPHONE NUMBER:** (604) 446-3445  
**COMPANY ADDRESS:** 111- 20351 Duncan Way, Langley, BC, V3A 7N3, CANADA

Note: The hand sanitizer is formulated using high quality United States Pharmacopoeia (USP) / Food Grade ingredients consistent with World Health Organization (WHO) recommendations.

## 2. Hazard(s) identification

### Label elements

#### Danger

#### Hazard statements

Highly flammable liquid and vapor.  
Causes serious eye irritation.



#### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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  
Wear protective gloves/eye protection/face protection

#### Precautionary Statements - Response

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  
IF ON SKIN (or hair): Rinse with water  
In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam to extinguish

#### Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

### Other information

May be harmful if inhaled. Causes mild skin irritation. May cause drowsiness or dizziness.

### 3. Composition / information on ingredients

#### Substance

Not applicable.

#### COMPOSITION:

Chemical name	CAS No	Weight-%	Other info
Ethanol	64-17-5	75.000	-
Water	7732-18-5	23.425	-
Glycerol	56-81-5	1.450	-
Hydrogen peroxide	7722-84-1	0.125	-

### 4. First-aid measures

#### Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	None under normal use conditions. If skin irritation occurs: Get medical advice/attention.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
<b>Self-protection of the first aider</b>	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

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

<b>Symptoms</b>	May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation.
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#### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray. Alcohol resistant foam.
<b>Unsuitable extinguishing media</b>	None known based on information supplied.
<b>Specific hazards arising from the chemical</b>	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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**Explosion data Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** Yes.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

**Other information** Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

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## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
Glycerol 56-81-5	-	TWA: 15 mg/m <sup>3</sup> mist, total particulate TWA: 5 mg/m <sup>3</sup> mist, respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> mist, total particulate (vacated) TWA: 5 mg/m <sup>3</sup> mist, respirable fraction	-
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup> (vacated) TWA: 1 ppm (vacated) TWA: 1.4 mg/m <sup>3</sup>	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup>

### Appropriate engineering controls

#### Engineering controls

Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Tight sealing safety goggles.

#### Hand protection

Wear suitable gloves.

#### Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.  
Antistatic boots.

#### Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

#### General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

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## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

Physical state	Liquid
Color	Colorless
Odor	Alcohol
Odor threshold	No data available

#### Property

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4.5 – 6.5	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	78.3 °C / 172.9 °F	
Flash point	17.5 °C / 63.5 °F	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

#### Other information

Explosive properties	No information available.
Oxidizing properties	No information available.
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available

## 10. Stability and reactivity

Reactivity	None under normal use conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May be harmful if inhaled. May cause drowsiness or dizziness.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. May cause mild skin irritation if skin is broken, bruised or allergic.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation.
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### Acute toxicity

#### Numerical measures of toxicity

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Glycerol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m <sup>3</sup> (Rat) 1 h
Hydrogen peroxide 7722-84-1	= 1518 mg/kg (Rat)	= 9200 mg/kg (Rabbit)	= 2000 mg/m <sup>3</sup> (Rat) 4 h

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. May cause skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	A3	Group 1	Known	X
Hydrogen peroxide 7722-84-1	A3	Group 3	-	-

## Legend

### ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

### IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

### NTP (National Toxicology Program)

Known - Known Carcinogen

### OSHA (Occupational Safety and Health Administration of the US Department of Labor)

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target organ effects** Eyes, Skin, Respiratory system.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethanol 64-17-5	-	LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: 13400 - 15100mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas)	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna)
Glycerol 56-81-5	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-
Hydrogen peroxide 7722-84-1	-	LC50: 18 - 56mg/L (96h, Lepomis macrochirus) LC50: =16.4mg/L (96h, Pimephales promelas) LC50: 10.0 - 32.0mg/L (96h, Oncorhynchus mykiss)	-	EC50: 18 - 32mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.

**Bioaccumulation** There is no data for this product.

### Component Information

Chemical name	Partition coefficient
Ethanol 64-17-5	-0.32
Glycerol 56-81-5	-1.76

**Other adverse effects** No information available.

## 13. Disposal considerations

### Waste treatment methods

**Waste from residues/unused products** Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Ethanol 64-17-5	Toxic Ignitable
Hydrogen peroxide 7722-84-1	Toxic Corrosive Ignitable Reactive

## 14. Transport information

**Note:** This is a consumer product and as such may usually be shipped as ORM-D (other regulated materials for domestic transport only). While this product is a hazardous material, it may be shipped in a limited quantity that presents a limited hazard during transportation. The information listed below is for shipping bulk material.

### DOT

UN/ID no UN1170  
 Proper shipping name ETHANOL SOLUTIONS  
 Hazard class 3  
 Packing group Special II  
 Provisions DOT Marine 24, IB2, T4,  
 Pollutant Description TP1 NP  
 Emergency Response Guide Number UN1170, ETHANOL SOLUTIONS, 3,  
 II 127

### IATA

UN number UN1170  
 UN proper shipping name Ethanol solution  
 Transport hazard class(es) 3  
 Packing group I  
 ERG Code I  
 Special Provisions 3  
 Description L  
 A180, A3, A58  
 UN1170, Ethanol solution, 3, II

### IMDG

UN number UN1170  
 UN proper shipping name ETHANOL SOLUTION  
 Transport hazard class(es) 3  
 Packing group II  
 EmS-No F-E,  
 Marine pollutant Special S-D  
 Provisions Description NP  
 UN1170, ETHANOL SOLUTION, 3, II, (17.5°C C.C.)



## 15. Regulatory information

### International Inventories

#### **TSCA**

Chemical name	CAS No	US TSCA Inventory listing	US TSCA active/inactive designation
Ethanol	64-17-5	Present	Active
Water	7732-18-5	Present	Active
Glycerol	56-81-5	Present	Active
Hydrogen peroxide	7722-84-1	Present	Active

#### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Hydrogen peroxide 7722-84-1	-	1000 lb

### US State Regulations

#### **California Proposition 65**

Ethyl alcohol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage. This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Ethanol - 64-17-5	Carcinogen Developmental

### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	X	X	X
Glycerol 56-81-5	X	X	X
Hydrogen peroxide 7722-84-1	X	X	X

## U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. Other information

<b>NFPA</b>	Health hazards 2	Flammability 3	Instability 0	Physical and chemical properties - Personal protection X
<b>HMIS</b>	Health hazards 2	Flammability 3	Physical hazards 0	

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### **Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value		

#### **Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
Health Canada  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

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#### **Disclaimer**

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