



Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064 (800) 955-1177
Emergency Number: (800) 255-3924

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Catalog Numbers: Part A of S25344
Product Identity: Ethanol, 95% Denatured

Chemical Family: Not Applicable
Synonyms: Ethyl Alcohol, Denatured Alcohol
Recommended Use: Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

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Section 2 – Hazard Identification

Emergency Overview

Flammable liquid. Toxic by ingestion; give large quantities of water and induce vomiting. Get medical attention. May cause dryness and cracking of the skin. May cause irritation to the respiratory tract, eyes and skin. Wash areas of contact. Get medical attention if irritation develops.

Appearance: Clear, colorless liquid **Odor:** Alcohol

Target Organs: Respiratory system, Eyes, Skin, Central nervous system, Liver, and Pancreas,

Potential Health Effects/ Routes of Exposure:

Eyes: May cause irritation, burning, pain, and possible damage to the cornea and conjunctiva.

Skin: May cause irritation, drying and cracking leading to secondary infection and dermatitis,

Ingestion: May cause hallucinations, sleep disorders, distorted perception, ataxia, motor function changes, convulsions, tremors, coma, and headaches.

Inhalation: May cause irritation to the upper respiratory tract, eyes, and nose, central nervous system depression, sleepiness, lack of concentration.

Chronic Effect / Carcinogenicity: None (IARC, NTP, OSHA)

Aggravated Medical Conditions No information available

These chemicals are considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

Ethanol, Denatured* CAS# 64-17-5, 95%

Water, purified, CAS# 7732-18-5, 5%

*Denaturants:

Methanol, CAS# 67-56-1

Methyl isobutyl ketone, CAS# 108-10-1

Isopropyl Alcohol, CAS# 67-63-0

Section 4 – First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

Skin: Flush with water for 15 minutes. Get medical assistance if irritation develops.
Ingestion: Induce vomiting. Dilute with water or milk. Get medical assistance.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Notes to Physician Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: 15.5 C **Autoignition Temperature** 362.8 C
Explosion Limits Upper 18.0 **Lower** 3.3
Extinguishing Media: Water, dry chemical, foam, or Carbon Dioxide. Water spray can keep containers cool.
Unsuitable Extinguishing Media: No information available
Fire & Explosion Hazards: Moderate explosion hazard. Dangerous fire hazard when exposed to heat, sparks, and open flames.
Fire Fighting Instructions / Equipment: Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment. Poisonous gas are produced in fire. Use water to keep surrounding containers cool.
Hazardous Combustion Products: No information Available
Sensitivity to mechanical impact No information available.
Sensitivity to static discharge No information available.
Specific Hazards Arising from the Chemical: No information available
NFPA Rating: (estimated) Health: 1; Flammable: 3; Reactivity: 0

Section 6 – Accidental Release Measures

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
Environmental Precautions Do not flush to sewer. Ethanol has a slight acute and chronic toxicity to aquatic life.
Methods for Containment and Clean Up Remove all sources of ignition. Contain spill. Do not flush to sewer. Absorb with suitable material and place in chemical waste container. Ventilate area of spill. Use non-sparking equipment.

Section 7 – Handling and Storage

Handling: Wash hands after handling. Avoid contact with skin and eyes. Empty containers can still be hazardous since they retain product residue.
Storage: Keep container tightly closed in a cool, dry area. Protect from freezing and physical damage. Store in secure, flammable storage area away from sources of ignition.

Section 8 – Exposure Controls, Personal Protection

Ethanol, Denatured* CAS# 64-17-5, ACGIH TLV: 1880mg/m³, OSHA PEL: 1900mg/m³
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

Engineering Measures/ General Hygiene: Local/general exhaust is recommended. Ensure eyewash and safety showers are available.
Personal Protection Equipment: **Skin Protection:** Chemical resistant gloves.
Eye/Face Protection: Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate. If exposure limit is exceeded, a full-face respirator with organic cartridge may be worn.

Section 9 – Physical and Chemical Properties

Appearance/Physical State: Clear, Colorless Liquid
Odor: Alcohol **% Volatility:** No Information Available
Boiling Point: 77 C **Specific Gravity:** Approx 0.8
Melting Point: -90 C **Vapor Pressure:** 48 mm Hg
Vapor Density: 1.5 **Flash Point:** 15.5 C
Evaporation Rate: 3.6 **Coefficient of water/oil distribution:** Not Available
pH: No Information Available **Odor Threshold:** Not Available

Flammability: Flammable

Solubility: Infinite
available

Relative Density: No Information Available

Decomposition Temperature: No Information Available

Partition Coefficient n-octanol/water: No data

Molecular Weight: Not available

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.

Incompatible Materials: Strong oxidizers, heat, sparks, open flames, platinum, sodium, bromine pentafluoride, potassium dioxide, acetyl bromide, acetyl chloride

Conditions to Avoid: Excess heat, Incompatible Materials, Ignition source, or Flame

Hazardous Decomposition Products: Oxides of carbon, acrid and irritating fumes

Hazardous Polymerization: Does not occur

Hazardous Reactions: None under normal processing.

Section 11 – Toxicological Information

Routes of Exposure/Symptoms/Corrosiveness – See Section 2

LD50 orl-rat: 7060mg/kg (Ethanol)

LC50 inhalation-rat: No Information Available

Irritation: No Information Available

Toxicologically Synergistic: No Information Available

Chronic Exposure

Carcinogenicity No Information Available

Sensitization No information available.

Mutagenic Effects No information Available

Reproductive Effects No information Available

Developmental Effects (Immediate/Delayed) No information available.

Teratogenicity No information available.

Other Adverse Effects No Information Available.

Endocrine Disruptor Information No information available

Section 12 – Ecological Information

Ecotoxicity: Ethanol has a slight acute and chronic toxicity to aquatic life.

Persistence and Degradability: No Information Available

Mobility: No Information Available

Bioaccumulation/ Accumulation: No Information Available

Section 13 – Disposal Considerations

Waste Disposal/Waste Disposal of Packaging: Absorb with inert material and place in container for disposal. Ventilate area of spill. Have fire extinguishing agent available in case of fire. Eliminate all sources of ignition. Use non-sparking equipment.

All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

Section 14 – Transport Information

DOT – UN1170, Ethanol, 3, II

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: This chemical is considered hazardous by OSHA.

Canada DSL: This chemical is on Canada's DSL.

TSCA: The components of this solution are listed on the TSCA Inventory

SARA Title III Section 313: Not Applicable

RCRA Status: Not Applicable

CERCLA Reportable Quantity: Not Applicable.

WHMIS: B-2: Flammable and Combustible Material. Flammable Liquid. D-2B: Poisonous and Infectious Material. Materials causing other toxic effects – Toxic Material.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Additional Information

Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.