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# **Ethanol, Anhydrous**

## **SECTION 1: Identification**

Product identifier

Product name: Ethanol, Anhydrous

Product code: S25307A

Recommended use of the product and restriction on use

Relevant identified uses: Nov 2 2015 12:00AM

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

#### Manufacturer or supplier details

Manufacturer: Supplier: United States United States

AquaPhoenix Scientific Fisher Science Education 860 Gitts Run Road 6771 Silver Crest Road

Hanover Nazareth
PA 17331 PA 18064
(717) 632-1291 800 955-1177

### **Emergency telephone number:**

**United States** 

Emergency Telephone No.: 800-255-3924

### SECTION 2: Hazard(s) identification

#### **GHS** classification:

Flammable liquids, category 2

#### **Label elements**

## Hazard pictograms:



Signal word: Danger

## Hazard statements:

H225 Highly flammable liquid and vapor.

## **Precautionary statements:**

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/light/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 If on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.

P370+P378 In case of fire: Use agents recommended in section 5 for extinction.

P403+P235 Store in a well ventilated place. Keep cool.

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## **Ethanol, Anhydrous**

P501 Dispose of contents and container as instructed in Section 13.

Hazards not otherwise classified: None

### **SECTION 3: Composition/information on ingredients**

Identification	Name	Weight %
CAS number: 64-17-5	Ethanol, Denatured*	100

Additional Information: None

#### **SECTION 4: First aid measures**

## **Description of first aid measures**

#### **General notes:**

Not determined or not applicable.

#### After inhalation:

Maintain an unobstructed airway

#### After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

#### After swallowing:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

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

## Acute symptoms and effects:

Not determined or not applicable.

#### **Delayed symptoms and effects:**

Not determined or not applicable.

# Immediate medical attention and special treatment

#### **Specific treatment:**

Not determined or not applicable.

## Notes for the doctor:

Not determined or not applicable.

# **SECTION 5: Firefighting measures**

## **Extinguishing media**

# Suitable extinguishing media:

Use dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

#### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors Vapors can flow to distant ignition sources and flashback

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### **Ethanol, Anhydrous**

Liquid is volatile and may generate an explosive atmosphere

#### Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing

Refer to Section 8

## Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols

Avoid contact with skin, eyes and clothing

### **SECTION 6: Accidental release measures**

## Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Beware of vapors accumulating to form explosive concentrations

Vapors can accumulate in low areas

#### **Environmental precautions:**

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

# Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Use spark-proof tools and explosion-proof equipment

### Reference to other sections:

Not determined or not applicable.

## SECTION 7: Handling and storage

### Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.

Avoid breathing mist or vapor.

Use only non-sparking tools.

Take precautionary measures against electrostatic discharges.

# Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

Keep container tightly sealed.

Keep away from all ignition sources: open flames, hot surfaces, direct sunlight, spark sources.

Store locked up.

Use appropriate containment to avoid environmental contamination.

Protect from freezing and physical damage.

# **SECTION 8: Exposure controls/personal protection**

Only those substances with limit values have been included below.

# Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Ethanol, Denatured*	64-17-5	ACGIH TLV TWA 1,000 ppm
	Ethanol, Denatured*	64-17-5	ACGIH TLV STEL 1,000 ppm
United States (OSHA)	Ethanol, Denatured*	64-17-5	OSHA PEL TWA 1,000 ppm
	Ethanol, Denatured*	64-17-5	OSHA PEL TWA 1,900 mg/m <sup>3</sup>
NIOSH	Ethanol, Denatured*	64-17-5	NIOSH REL TWA 1,000 ppm

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# **Ethanol, Anhydrous**

Country (Legal Basis) Substance		Identifier	Permissible concentration	
	Ethanol, Denatured*	64-17-5	NIOSH REL TWA 1,900 mg/m <sup>3</sup>	

## **Biological limit values:**

No biological exposure limits noted for the ingredient(s).

# Information on monitoring procedures:

Not determined or not applicable.

# Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Use explosion-proof ventilation equipment.

## Personal protection equipment

## Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

## Skin and body protection:

Select glove material impermeable and resistant to the substance.

# **Respiratory protection:**

When necessary, use NIOSH-approved breathing equipment.

## **General hygienic measures:**

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

## **SECTION 9: Physical and chemical properties**

### Information on basic physical and chemical properties

Appearance	Clear, Colorless liquid
Odor	Alcohol-like
Odor threshold	Not available
рН	Not available
Melting point/freezing point	-80 °C
Initial boiling point/range	74 - 80 °C
Flash point (closed cup)	5 °C
Evaporation rate	4.1
Flammability (solid, gas)	Flammable
Upper flammability/explosive limit	Not available
Lower flammability/explosive limit	Not available
Vapor pressure	42 mm Hg
Vapor density	1.6
Density	Not available
Relative density	0.795
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not available
Auto/Self-ignition temperature	Not available
Decomposition temperature	Not available
Dynamic viscosity	Not available

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## **Ethanol, Anhydrous**

Kinematic viscosity	Not available	
Explosive properties	Not determined or not available.	
Oxidizing properties	Not determined or not available.	

#### Other information

# **SECTION 10: Stability and reactivity**

#### Reactivity:

Does not react under normal conditions of use and storage.

## **Chemical stability:**

Stable under normal conditions of use and storage.

#### Possibility of hazardous reactions:

None under normal conditions of use and storage.

#### **Conditions to avoid:**

Excess heat, ignition sources or flames.

#### **Incompatible materials:**

None known.

#### **Hazardous decomposition products:**

None known.

### **SECTION 11: Toxicological information**

#### **Acute toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

## Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

#### Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

# Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

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

Name	Classification
Ethanol, Denatured*	Group 1 - Carcinogenic to humans

National Toxicology Program (NTP): None of the ingredients are listed.

# Germ cell mutagenicity

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## **Ethanol, Anhydrous**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

## **SECTION 12: Ecological information**

### Acute (short-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

**Bioaccumulative potential** 

**Product data:** No data available. **Substance data:** No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

# **SECTION 13: Disposal considerations**

#### **Disposal methods:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

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# **Ethanol, Anhydrous**

# **SECTION 14: Transport information**

## United States Transportation of dangerous goods (49 CFR DOT)

UN number	1170	
UN proper shipping name	Ethanol	
UN transport hazard class(es)	3	
Packing group	II	
Environmental hazards	None	
Special precautions for user	None	

# **International Maritime Dangerous Goods (IMDG)**

UN number	UN1170
UN proper shipping name	Ethanol
UN transport hazard class(es)	3
Packing group	II
Environmental hazards	None
Special precautions for user	None

## International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1170	
UN proper shipping name	Ethanol	
UN transport hazard class(es)	3	
Packing group	II	
Environmental hazards	None	
Special precautions for user	None	

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		
Bulk Name None		
Ship type	None	
Pollution category	None	

# **SECTION 15: Regulatory information**

# **United States regulations**

Inventory listing (TSCA):

164-17-5	Ethanol, Denatured*	IListed

Significant New Use Rule (TSCA Section 5): Not determined.

**Export notification under TSCA Section 12(b):** Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive

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# **Ethanol, Anhydrous**

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SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals: Not determined.

**CERCLA:** Not determined. **RCRA:** Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

347	22-90-2	,	Not Listed
64-1	L7-5	Ethanol, Denatured*	Listed

### **New Jersey Right to Know:**

34722-90-2	Bromothymol Blue, Sodium Salt	
64-17-5	·	Not Listed

## **New York Right to Know:**

34722-90-2		Not Listed
64-17-5	Ethanol, Denatured*	Listed

## Pennsylvania Right to Know:

34722-90-2		Not Listed
64-17-5	Ethanol, Denatured*	Listed

California Proposition 65: Not determined.

## **SECTION 16: Other information**

# **Abbreviations and Acronyms:** None **Disclaimer:**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 1-3-0 **HMIS:** 1-3-0

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**End of Safety Data Sheet**