# **Material Safety Data Sheet**



# Ethanol, Denatured, Absolute

**Revised:** 03/23/2012 **Replaces:** 11/18/2011 **Printed:** 08/10/2012

# Carolina Biological Supply Company

UHRULINA www.carolina.com

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150

# **Section 1 - Product Description**

Product Name: Ethanol, Absolute

**Product Code(s):** 86-1300, 84-0509, 86-1298, 97-4899, C71523

Size: 5 ml, 4 L, 473mL, 20L Chemical Name: Ethyl Alcohol CAS Number: 64-17-5 Formula: See Section 3 Synonyms: Ethyl Alcohol

Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) Chemtrec 800-424-9300 (Transportation Spill Response 24

hours)

#### **Section 2 - Hazard Identification**

**Emergency Overview:** Harmful if inhaled or swallowed. Extremely flammable.

**Potential Health Effects:** 

**Eyes:** May cause irritation. **Skin:** May cause irritation to skin.

**Ingestion:** May cause gastrointestinal discomfort. **Inhalation:** May cause irritation to respiratory tract.

# **Section 3 - Composition / Information on Ingredients**

**Principal Hazardous Components:** Ethanol (CAS# 64-17-5) 90.5%; Isopropanol (CAS# 67-63-0) 5.0%; Methanol

(CAS# 67-56-1) 4.5%

TLV units: ACGIH-TLV 1000 ppm (TWA)
PEL units: OSHA-PEL 1000 ppm (TWA)

# **Section 4 - First Aid Measures**

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

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Ingestion - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

# **Section 5 - Firefighting Procedures**

Flash Point (Method Used): 13 °C (CC)

Product Name: Ethanol, Denatured, Absolute Page 1 of 3

NFPA Rating: Health: 2 Fire: 3 Reactivity: 0

Extinguisher Media: Use dry chemical, CO2 or appropriate foam. Flammable Limits in Air % by Volume: LEL: 3.3% UEL:19%

**Autoignition Temperature:** 363 °C

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

Unusual Fire and Explosion Hazards: N/A

# **Section 6 - Spill or Leak Procedures**

**Steps to Take in Case Material Is Released or Spilled:** Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

# **Section 7 - Special Precautions**

**Precautions to Take in Handling or Storing:** Keep container tightly closed in a cool, well-ventilated place. Extremely flammable.

## **Section 8 - Protection Information**

**Respiratory Protection (Specify Type):** None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

**Ventilation:** 

Local Exhaust: Yes Mechanical(General): Yes

**Special:** No **Other:** No

**Protective Gloves:** Natural rubber, Neoprene, PVC or equivalent. **Eye Protection:** Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

## **Section 9 - Physical Data**

**Molecular Weight:** 46.07 **Melting Point:** -114 °C

Boiling Point: 78 °CVapor Pressure: 44 mmHg at 25 °CVapor Density(Air=1): >1Specific Gravity (H2O=1): .790 at 20 °CPercent Volatile by Volume: 100%Evaporation Rate (BuAc=1): N/A

**Solubility in Water:** Soluble **Appearance and Odor:** Clear, colorless liquid, Alcohol odor.

## **Section 10 - Reactivity Data**

Stability: Stable

Conditions to Avoid: Heat and sources of ignition. Incompatibility (Materials to Avoid): Oxidizers, Hazardous Decomposition Products: COx, Hazardous Polymerization: Will not occur

# **Section 11 - Toxicity Data**

Toxicity Data: orl-rat LD50 7060 mg/kg; ihl-rat LC50 20000 ppm/10H

**Effects of Overexposure: Acute:** See Section 2

Chronic: Reproductive data cited. Not listed as a carcinogen by IARC, NTP or OSHA. Mutation data cited. Tumorigenic

Page 2 of 3

Product Name: Ethanol, Denatured, Absolute

data cited.

Conditions Aggravated by Overexposure: Eye disorders, Target Organs: Eyes, Central Nervous System, Kidneys, Primary Route(s) of Entry: Inhalation and ingestion.

#### **Section 12 - Ecological Data**

EPA Waste Numbers: Ethanol, Isopropanol: D001, Methanol: U154

## **Section 13 - Disposal Information**

**Waste Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

# **Section 14 - Transport Information**

DOT Proper Shipping Name: UN1987, Alcohols, n.o.s., 3, PG II

# **Section 15 - Regulatory Information**

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute Fire Chronic

Name List: Chemical Category:

Ethanol - No Ethanol - No

CERCLA Section 103 RQ(lb.): Ethanol - No

RCRA Section 261.33: Ethanol - No

#### **Section 16 - Additional Information**

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH American Conference of Governmental Industrial Hygienists

CAS Number Chemical Services Abstract Number

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

DOT U.S. Department of Transportation

IARC International Agency of Research on Cancer

N/A Not Available

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

ppm Parts per million

RCRA Resource Conservation and Recovery Act
SARA Superfund Amendments and Reauthorization Act

TLV Threshold Limit Value TSCA Toxic Substances Control Act

Product Name: Ethanol, Denatured, Absolute Page 3 of 3