

MATERIAL SAFETY DATA SHEET

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ETHYL ACETATE, LAB GRADE  
CAROLINA BIOLOGICAL SUPPLY COMPANY

Revised 9/18/95  
Replaces 9/14/95  
Printed 10/09/95

1. PRODUCT DESCRIPTION

Product Name: Ethyl Acetate  
Product Code(s): 86-1490, 86-1492, 86-1510, 86-1512  
Size: 500ml, 1 gal, 4 L  
Chemical Name: Ethyl Acetate  
CAS Number: 141-78-6  
Formula: CH<sub>3</sub>COOC<sub>2</sub>H<sub>5</sub>  
Synonyms: Acetic Ether, Acetoxyethane; Vinegar Naphtha  
Distributor: Carolina Biological Supply Company  
Chemical Emergency Information: 910-584-0381 (8am-5pm (ET) M-F)  
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300  
Poison Control Center (Medical Emergencies 24 Hours) 800-84TOXIN

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principle Hazardous Components: Ethyl Acetate 100%  
TLV and PEL units: ACGIH-TLV 400 ppm (TWA) ACGIH-TLV 1440 mg/m<sup>3</sup> (TWA)  
OSHA-PEL 400 ppm (TWA); OSH-PEL 1400 mg/m<sup>3</sup> (TWA)

3. HAZARD IDENTIFICATION

Emergency Overview: Flammable liquid and vapor. May be harmful if inhaled or swallowed. May be irritating to skin, eyes and mucous membranes. May cause damage to liver and kidneys. High concentrations have a narcotic effect and can cause congestion of the liver and kidneys. High vapor concentrations cause headache, narcosis, irritation of the eyes, nose throat (severe eye irritation at 400 ppm), unconsciousness. Irritating to mucous surfaces, particularly the eyes, gums and respiratory passages, and is mildly narcotic. On repeated or prolonged exposures, it causes conjunctival irritation and corneal clouding.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.

Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

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4. FIRST AID MEASURES (Cont.)

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Ingestion - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

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5. FIREFIGHTING PROCEDURES

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Flash Point (Method Used): 24F (TCC)

NFPA Rating: Health: 1  
Fire: 3  
Reactivity: 0

Extinguisher Media:

Use dry chemical, CO2 or alcohol foam.

Flammable Limits in Air % by Volume:

Autoignition Temperature: 800F

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: A very dangerous fire hazard when exposed to heat or flame. Vapor can travel distances to ignition source and flash back. Hot organic chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below published autoignition or ignition temperatures.

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6. SPILL OR LEAK PROCEDURES

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Steps to be Taken 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 absorbant and containerize for disposal.

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7. SPECIAL PRECAUTIONS

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Precautions to be Taken in Handling or Storing: Keep container closed. Store in a cool area away from ignition sources and oxidizers. Do not breathe vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution!

Other Precautions: Wash thoroughly after handling. Do not take internally.

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8. SPECIAL PROTECTION INFORMATION

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Respiratory Protection(Specify Type):

A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Preferred  
Mechanical(General): Acceptable  
Special: No  
Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab coat, eye wash, and safety shower.

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9. PHYSICAL DATA

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Molecular Weight: 88.11

Melting Point: -83.6C

Boiling Point:77.15C

Vapor Pressure:100 mm @27.0 C

Vapor Density(Air=1): 3.04

Specific Gravity(H2O=1): 0.8946@25C

Percent Volatile by Volume: 99%

Evaporation Rate(H2O=1): 7.5

Solubility in Water:1ml dissolves in 10 mL water at 25 C; more soluble at lower and less soluble at higher temperatures.

Appearance and Odor: Clear, volatile, flammable liquid; characteristic fruity odor

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10. REACTIVITY DATA

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Stability: Stable

Conditions to Avoid: Contact with ignition source heat. Ignites on contact with potassium tert-butoxide. Violent reaction with chlorosulfonic acid: (LiAlH<sub>4</sub>+2-chloromethylfuran): oleum. Potentially explosive reaction with lithium tetrahydroaluminate. Can react vigorously with oxidizers. Incompatibility(Materials to Avoid): Acids, oxidizers, strong alkalies, nitrates

Hazardous Decomposition Products: COx

Hazardous Polymerization: Will not occur

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11. TOXICITY DATA

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Toxicity Data:

Effects of Overexposure:

Acute: See section 3

Chronic: Mutation data cited. Not listed as causing cancer by IARC, NTP or OSHA.

Conditions Aggravated by Overexposure: Respiratory, kidney, liver, skin, and blood disorders.

Target Organs: Eyes, skin, respiratory passages and mucous surfaces.

Primary Route(s) of Entry: Ingestion, inhalation.

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12. ECOLOGICAL DATA

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EPA Waste Numbers: U112 D001

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13. DISPOSAL INFORMATION

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Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

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14. TRANSPORT INFORMATION

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Ethyl acetate, 3, UN1173, II

Label required: Flammable Liquid

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15. REGULATORY INFORMATION

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EPA TSCA Status: On TSCA Inventory

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

Product or Components	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals Name Chemical List Category	CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33
Ethyl acetate	No	No No	5000	Yes

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16. ADDITIONAL INFORMATION

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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  
CWA.....Clean Water Act  
DOT.....U.S. Department of Transportation  
IARC.....International Agency of Research on Cancer  
IATA.....International Air Transport Association  
IMO.....International Maritime Organization  
N/A.....Not Available  
NTP.....National Toxicology Program  
OSHA.....Occupational Safety and Health Administration  
PEL.....Permissible Exposure Limit  
PPM.....parts per million  
RTECS.....Registry of Toxic Effects of Chemical Substances  
(published by the National Institute of Occupational Safety and Health, NIOSH)  
TLV.....Threshold Limit Value

Date: : 10/09/95  
Customer: 5213850

Order Number: 00292023

BUTLER AREA SCHOOL DISTRICT  
225 E NORTH ST  
BUTLER PA 16001

To assist you in complying with the Federal OSHA Hazard Communication Standard, we have enclosed a Material Safety Data Sheet (MSDS) for each chemical you have purchased from Carolina Biological. A MSDS is only sent when a product is first ordered by a customer, you have not received a MSDS for that chemical within the last year, or if there has been a change in the MSDS.

If you have any questions about a particular MSDS or would like another copy, please call our safety and health office. Carolina Biological is committed to servicing the needs of our customers.

The following page lists the Material Safety Data Sheet(s) included with this shipment.