

MATERIAL SAFETY DATA SHEET

VINEGAR
CAROLINA BIOLOGICAL

Revised: 16/07/04
Replaces: 09/05/00
Printed: 20/05/08

1. PRODUCT DESCRIPTION

Product Name: Vinegar
Product Code(s): 89-8110, 84-0935, 84-0975, 95-7860, 97-2901, 97-2923
84-0477, 95-8005, 84-0486, 84-0487, 84-0880, 84-0884
95-8002
Size: 7 mL, 500 ml
Chemical Name: Acetic Acid
CAS Number: 64-19-7
Formula: CH₃COOH
Synonyms: Ethanoic Acid
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principle Hazardous Components: Acetic Acid (CAS#64-19-7) 4-6%
TLV and PEL units: ACGIH-TLV 10ppm(TWA), STEL 15ppm
OSHA-PEL 10ppm(TWA)

3. HAZARD IDENTIFICATION

Emergency Overview: Do not ingest. Avoid skin and eye contact. Avoid exposure to vapors or mists.
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.
Ingestion - Do not induce vomiting. If swallowed, if conscious, give plenty of water immediately and 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.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used):109F (cc)
NFPA Rating: Health: 2
Fire: 2
Reactivity: 1

Extinguisher Media:

Use dry chemical, CO₂ or appropriate foam.

Flammable Limits in Air % by Volume: 5.4%LEL 16.0%UEL

Autoignition Temperature: No data available

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved

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self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: No data available

6. SPILL OR LEAK PROCEDURES

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 absorbent and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Store above 62F, away from direct heat, ignition sources and oxidizers.
Other Precautions: Do not reuse container. Residue may make empty containers dangerous.

8. SPECIAL PROTECTION INFORMATION

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: 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.

9. PHYSICAL DATA

Molecular Weight:	60.05
Melting Point:	16.7C
Boiling Point:	118.1C
Vapor Pressure:	11.4 at 20C
Vapor Density(Air=1):	2.07
Specific Gravity(H2O=1):	1.049
Percent Volatile by Volume:	100
Evaporation Rate(BuAc=1):	0.97
Solubility in Water:	Miscible
Appearance and Odor:	Clear colorless liquid with pungent odor.

10. REACTIVITY DATA

Stability: Stable
Conditions to Avoid: Heat, ignition sources, metals
Incompatibility(Materials to Avoid): Oxidizers, strong alkalies, metals, amines, cyanides, sulfides, chromic acid, nitric acid, hydrogen peroxide, carbonates.
Hazardous Decomposition Products: COx
Hazardous Polymerization: Will not occur

11. TOXICITY DATA

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Toxicity Data: ihl-mus LC50: 5620 ppm/1H orl-rat LD50: 3530 mg/kg
skin-rbt LD50: 1060 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: Mutation and reproductive effects data cited. Not listed as

causing cancer by IARC, NTP, or OSHA.

Conditions Aggravated by Overexposure: Respiratory conditions

Target Organs: Eyes, skin, and respiratory tract.

Primary Route(s) of Entry: Inhalation, ingestion or skin contact.

12. ECOLOGICAL DATA

EPA Waste Numbers: D002 D001

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.

14. TRANSPORT INFORMATION

DOT Proper Shipping Name: Non-regulated

15. REGULATORY INFORMATION

EPA TSCA Status: On the TSCA Inventory List.

Hazard Category for SARA Section 311/312 Reporting: Acute

SARA EHS Section 302 TPQ(lbs.)No

SARA Section 313 Chemicals

Name List:

Chemical Category:

No

No

CERCLA Section 103 RQ(lbs.): 5,000

RCRA Section 261.33: No

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 Abstracts Service Number

CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act

DOT.....U.S. Department of Transportation

IARC.....International Agency of Research on Cancer

mppcf.....million particles per cubic foot

N/A.....Not Available

NTP.....National Toxicology Program

OSHA.....Occupational Safety and Health Administration

PEL.....Permissible Exposure Limit

ppm.....parts per million

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RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act