

Material Safety Data Sheet

VINEGAR

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 Emergency Information:
800-227-1150 (8 am–5 pm [ET] M–F)
Chemtrec (Transportation Spill Response 24 hours):
800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal Hazardous Components:
Acetic Acid (CAS #64-19-7) 4–6%

TLV and PEL units:
ACGIH-TLV 10 ppm (TWA),
STEL 15 ppm
OSHA-PEL 10 ppm (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 and quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point (Method Used): 109°F (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 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 put into a proper container.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Store above 62°F, 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

(continued)

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VINEGAR (CONT.)

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: 16.7°C.

Boiling Point: 118.1°C.

Vapor Pressure: 11.4 at 20°C.

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 alkalis, metals, amines, cyanides, sulfides, chromic acid, nitric acid, hydrogen peroxide, carbonates.

Hazardous Decomposition Products: CO_x.

Hazardous Polymerization: Will not occur.

11. TOXICITY DATA

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 TSCA Inventory.

Hazard Category for SARA Section 311/312 Reporting: Acute.

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

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.