

# **MATERIAL SAFETY DATA SHEET**

Acetic Acid 10%  
CAROLINA BIOLOGICAL

Revised: 07/19/07  
Replaces: 07/10/07  
Printed: 08/03/10

---

## **1. PRODUCT DESCRIPTION**

Product Name: Acetic Acid 10%  
Product Code(s): 84-1313, BM6010, 84-0996  
Size: 10ml, 500ml  
Chemical Name: Acetic Acid  
CAS Number: 64-19-7  
Formula: CH<sub>3</sub>COOH  
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**

Principal Hazardous Components: Acetic Acid (CAS#64-19-7) 10%  
TLV and PEL units: ACGIH-TLV 10ppm(TWA), 15ppm (STEL)  
OSHA-PEL 10ppm(TWA); 25 mg/m<sup>3</sup> (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):104F (cc) for glacial acetic acid; flash point will be considerably higher for this solution

NFPA Rating (for 100% acetic acid): Health: 3  
Fire: 2  
Reactivity: 1

Extinguisher Media:

Use dry chemical, CO<sub>2</sub> or appropriate foam.

Flammable Limits in Air % by Volume for acetic acid: 4%LEL 19.9%UEL

Autoignition Temperature: 463°C

Special Firefighting Procedures:

## MATERIAL SAFETY DATA SHEET

Acetic Acid 10%  
CAROLINA BIOLOGICAL

Revised: 07/19/07  
Replaces: 07/10/07  
Printed: 08/03/10

---

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 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**

For glacial acetic acid:

Molecular Weight: 60.05  
Melting Point: 16.7°C  
Boiling Point: 118.1°C  
Vapor Pressure: 11.4 mmHg 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 alkalies, metals, amines, cyanides, sulfides, chromic acid, nitric acid, hydrogen peroxide, carbonates.

Hazardous Decomposition Products: COx

Hazardous Polymerization: Will not occur

### **11. TOXICITY DATA**

## **MATERIAL SAFETY DATA SHEET**

Acetic Acid 10%  
CAROLINA BIOLOGICAL

Revised: 07/19/07  
Replaces: 07/10/07  
Printed: 08/03/10

---

Toxicity Data: (for glacial acetic acid)  
ihl-mus LC50: 5620 ppm/1H  
orl-rat LD50: 3310 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**

Not regulated at 10% or less concentration.

### **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: No Chemical Category: 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

## MATERIAL SAFETY DATA SHEET

Acetic Acid 10%  
CAROLINA BIOLOGICAL

Revised: 07/19/07  
Replaces: 07/10/07  
Printed: 08/03/10

---

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