

## Material Safety Data Sheet



# Acetaldehyde

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**Carolina Biological Supply Company**

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**CAROLINA**  
www.carolina.com

### Section 1 - Product Description

**Product Name:** Acetaldehyde

**Product Code(s):** 841271

**Size:** 100 mL

**Chemical Name:** Acetaldehyde

**CAS Number:** 75-07-0

**Formula:** CH<sub>3</sub>CHO

**Synonyms:** Acetic Aldehyde, Ethanal, Ethyl Aldehyde

**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:** **DANGER** - Extremely flammable. Harmful by inhalation and if swallowed. Limited evidence of a carcinogenic effect.

**Potential Health Effects:**

**Eyes:** Causes severe burns and eye damage upon direct contact. Vapor is irritating.

**Skin:** May cause severe irritation or chemical burns.

**Ingestion:** May severely irritate or damage digestive tract.

**Inhalation:** May severely irritate or damage mucous membranes and respiratory tract.

### Section 3 - Composition / Information on Ingredients

**Principal Hazardous Components:** Acetaldehyde (CAS# 75-07-0) 99%

**TLV units:** ACGIH - TLV 25 ppm (ceiling)

**PEL units:** OSHA - PEL 200 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, 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):** -39°C

**NFPA Rating:**

**Health:** 2

**Fire:** 4

**Reactivity:** 2

**Extinguisher Media:** Use dry chemical, CO<sub>2</sub> or appropriate foam.

**Flammable Limits in Air % by Volume:** 4.1% 55%

**Autoignition Temperature:** 175°C

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

**Unusual Fire and Explosion Hazards:** Vapours may travel back to ignition source. Closed Containers exposed to heat may explode.

## Section 6 - Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Keep locked up and out of the reach of children.

## Section 7 - Special Precautions

**Precautions to Take in Handling or Storing:** Keep out of the reach of children.

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

Wear suitable protective clothing and gloves. This material should be kept in an area suitable for the storage of flammable liquids. Store away from oxidizing agents, sparks and flame.

## 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:** 44.05

**Boiling Point:** 20.14°C

**Vapor Density(Air=1):** 1.52

**Percent Volatile by Volume:** 100%

**Solubility in Water:** Soluble

**Melting Point:** -123.37°C

**Vapor Pressure:** 1006 hPa @ 20°C

**Specific Gravity (H<sub>2</sub>O=1):** 0.7834 @ 18°C

**Evaporation Rate (BuAc=1):** 49.1

**Appearance and Odor:** Clear, colorless liquid, characterisic and

pungent odor.

## Section 10 - Reactivity Data

**Stability:** Unstable

**Conditions to Avoid:** Heat and sources of ignition.

**Incompatibility (Materials to Avoid):** Oxidizers, Acids, Bases, Amines, Anhydrides, Halogens, Phenols, Alcohols, Ketones, Isocyanates,

**Hazardous Decomposition Products:** CO<sub>x</sub>,

**Hazardous Polymerization:** Will not occur

## Section 11 - Toxicity Data

**Toxicity Data:** Oral Rat LD50: 1930mg/kg

Inhalation Mouse LC50: 1500 ppm/4hr

Skin Rabbit LD50: 3540 mg/kg

**Effects of Overexposure:**

**Acute:** See Section 2

**Chronic:** Mutation data cited. Reproductive data cited. Tests on laboratory animals indicate material may produce adverse mutagenic and reproductive effects.

**Conditions Aggravated by Overexposure:** Respiratory disorders,

**Target Organs:** Eyes, Skin, Respiratory system,

**Primary Route(s) of Entry:** Inhalation, Ingestion, and Skin contact.

## Section 12 - Ecological Data

**EPA Waste Numbers:** U001 (igniteable waste)

## 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:** UN1089

Ethanal

Hazard Class = 3

P.G. I

1000 lb RQ (454 kg RQ)

## Section 15 - Regulatory Information

**EPA TSCA Status:** On TSCA Inventory

**WARNING:** This product contains a chemical known to the state of California to cause cancer.

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

**WARNING:** This product contains a chemical known to the state of California to cause cancer.

**Name List:**

Yes

**Chemical Category:**

No

**CERCLA Section 103 RQ(lb.):** 1000 lb final RQ (454 kg final RQ)

**RCRA Section 261.33:** U001

## 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