

**MATERIAL SAFETY DATA SHEET****SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

Product Name: Acetaldehyde  
Product Code: A00290  
  
Supplier: Pfaltz & Bauer, Inc.  
172 E. Aurora Street  
Waterbury, CT 06708 USA  
  
Phone: 203 574-0075  
Fax: 203 574-3181  
Emergency Phone: CHEMTREC, US: 1-800-424-9300  
CHEMTREC, International: 1-703-527-3887

**SECTION 2: COMPOSITION/INFORMATION on INGREDIENTS**

Chemical Name: Acetaldehyde  
Synonyms: Acetic Aldehyde; Acetylaldehyde  
CAS Number: 75-07-0  
MDL Number: MFCD00006991  
Beilstein Reg. Number: 505984  
Molecular Formula: CH<sub>3</sub>CHO  
Molecular Weight: 44.04

**SECTION 3: HAZARDS IDENTIFICATION**

Acute Health Hazard: Severe irritant to eyes, skin, mucous membranes and respiratory system. Harmful by ingestion, inhalation or skin absorption. Possible Risk of irreversible effects. Sensitization by skin contact.  
  
Chronic Health Hazard: Pulmonary Edema. Effects may be delayed. Dermatitis. Carcinogen. Possible Teratogen, Mutagen. Reproductive Hazard.  
  
HMIS Rating: H:2 F:4 R:2  
  
NFPA Rating: H:2 F:4 R:2

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

**SECTION 4: FIRST AID MEASURES**

<u>Eye Contact:</u>	Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.
<u>Skin Contact:</u>	Wash skin with soap and water. If irritation persists, seek medical attention.
<u>Ingestion:</u>	Do not induce vomiting. Seek medical attention.
<u>Inhalation:</u>	Move to a fresh air environment. Contact a physician if breathing becomes difficult.

**SECTION 5: FIRE FIGHTING MEASURES**

<u>Flash Point:</u>	-40°C Closed Cup
<u>Explosion Limits:</u>	Lower: 4% by volume Upper: 60% by volume
<u>Auto Ignition Temperature:</u>	174°C
<u>Extinguishing Media:</u>	Carbon dioxide, dry chemical powder or foam, water spray.
<u>Protective Equipment:</u>	Wear self-contained respirator and fully protective impervious suit.
<u>Specific Hazards:</u>	Mutagen

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

<u>Personal Protection:</u>	Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Keep unprotected persons away.
<u>Environmental Protection:</u>	Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

**SECTION 7: HANDLING and STORAGE**

<u>Handling:</u>	Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.
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Storage: Store in a tightly closed container in a dry, well-ventilated place.

Storage Temperature: 15 - 30°C

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Eyes: Wear appropriate protective eyeglass or chemical safety goggles. Eyewash facility in vicinity.

Skin: Wear impervious gloves and protective clothing.

Respiratory: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

## **SECTION 9: PHYSICAL and CHEMICAL PROPERTIES**

Appearance: Colorless Liquid  
Air Sensitive  
Store Below 4°C

Odor: Pungent

Melting Point: -125°C

Boiling Point: 21°C

Density: 00.7800

Refractive Index,  $n_D^{20}$ : 1.3310 – 1.3330

## **Solubility in Water: SECTION 10: STABILITY and REACTIVITY**

Stability: Stable under normal temperatures and pressures.

Incompatibility: Oxidizing Agents, Reducing Agents, Strong Acids, Strong Bases, Alcohols, Amines, Sulfides Air.  
Acetaldehyde is oxidized rapidly and exothermically by air to form peroxides that can lead to spontaneous explosion.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

RTECS Number: AB1925000

Target Organs: Liver, Kidneys, Blood, CNS.

Toxicity Data: Oral Rat LD<sub>50</sub>: 661 mg/kg

Oral Mouse LD<sub>50</sub>: 900 mg/kg

Intraperitoneal Mouse LD<sub>50</sub>: 500 mg/kg

Skin Rabbit LD<sub>50</sub>: 3540 mg/kg

**SECTION 12: ECOLOGICAL INFORMATION**

Not Available

**SECTION 13: DISPOSAL CONSIDERATIONS**

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

**SECTION 14: TRANSPORT INFORMATION**

DOT Shipping Name: Acetaldehyde

DOT UN Number: 1089

DOT Hazard Class: 3

DOT Packing Group: I

IATA Shipping Name: Acetaldehyde

IATA UN Number: 1089

IATA Hazard Class: 3

IATA Packing Group: I

**SECTION 15: REGULATORY INFORMATION**

United States:

Toxic Substance Control Act (TSCA): Listed

Superfund Amendments and Reauthorization Act (SARA 302): listed

Superfund Amendments and Reauthorization Act (SARA 313): listed

International:

European Inventory of Existing Chemical Substances (EINECS): Listed (208-836-8)

Canadian Domestic Substances List (DSL): Listed

**SECTION 16: OTHER INFORMATION**

Date Prepared: 1/23/2008 MAB

The information above is presented in good faith. It is believed to be accurate and represents the best information currently available to us. However we make no warranty with respect to such information and we assume no liability resulting from its use. The user should consider this information as a supplement to other information that may be available and make independent judgment to ensure proper use to protect the health and safety of employees and the environment. Pfaltz and Bauer shall not be held liable for any damage resulting from handling or from contact with the above product.