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: CH₃CHO
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.


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

Eye Contact: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.

Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.

Ingestion: Do not induce vomiting. Seek medical attention.

Inhalation: Move to a fresh air environment. Contact a physician if breathing becomes difficult.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: -40ºC Closed Cup

Explosion Limits: Lower: 4% by volume
Upper: 60% by volume

Auto Ignition Temperature: 174ºC

Extinguishing Media: Carbon dioxide, dry chemical powder or foam, water spray.

Protective Equipment: Wear self-contained respirator and fully protective impervious suit.

Specific Hazards: Mutagen

SECTION 6: ACCIDENTAL RELEASE MEASURES


Environmental Protection: 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

Handling: 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.
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, n²⁰: 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. 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 LD₅₀: 661 mg/kg
Oral Mouse LD₅₀: 900 mg/kg
Intraperitoneal Mouse LD₅₀: 500 mg/kg
Skin Rabbit LD₅₀: 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.