



## Material Safety Data Sheet

### Section I: Identification & Information

Name: Acetic Anhydride                      Chemical Family:  
Anhydride

Synonyms: Acetanhydride; acetyl oxide; acetic acid, anhydride  
Formula:  $(\text{CH}_3\text{CO})_2\text{O}$                       M.W.: 102.09

DOT Proper Shipping Name: Acetic Anhydride  
DOT Identification No.: UN1715      CAS No.: 108-24-7  
DOT Hazard Class: Corrosive and Flammable Liquid

### Section II: Physical Properties

Appearance: Clear, colorless liquid	Odor: Strong acetic odor; good warning properties
Vapor Pressure @ 20°C: 4mmHg	Specific Gravity ( $\text{H}_2\text{O}=1$ ): 1.08
Vapor Density (air=1): 3.52	Evaporation Rate (BuAc=1): 0.46
Stability: Stable	Solubility in $\text{H}_2\text{O}$ : Soluble
Boiling Point: 140°C	Melting point: -73°C
Water Reactive: yes	

### Section III: Reactivity Hazard Data

Stable material under ordinary conditions of use and storage. Heat will contribute to instability. Hazardous polymerization does not occur.

Conditions to avoid: Heat, sparks, open flames, open containers, poor ventilation.

Materials to avoid: Water, steam, oxidizing materials, alcohols, acids, bases, reducing agents, finely powdered metals.

Hazardous decomposition products: Toxic fumes of carbon monoxide and carbon dioxide.



vomiting. Never give anything orally to a person who is unconscious or in convulsions.

- Eye contact: Rinse with copious amounts of water for at least 15 minutes. Get emergency medical assistance.
- Skin contact: Flush thoroughly with water for at least 15 minutes. Remove contaminated clothes and shoes. Wash clothing and shoes before reuse. Get emergency medical assistance.
- Inhalation: Immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep patient warm and at rest. Get emergency medical assistance.

### ***Section VII: Special Protection***

Ventilation: Adequate ventilation is required to control vapors and odor. Use only in a chemical fume hood.

Respiratory Protection: Cartridge respirators should be worn if the TLV is exceeded.

Skin Protection: Protective rubber gloves and clothing are recommended. The choice of material must be based on chemical resistance and other user requirements.

Eye Protection: Laboratory safety glasses are minimum protection. Goggles or faceshield are preferred. Contact lenses should not be worn when working with this material.

Emergency eye wash fountains and safety showers should be available in the vicinity of any potential exposure. Ground and bond metal containers to minimize sparks.

### ***Section VIII: Spill and Disposal Procedures***

If a spill occurs, protect from ignition. Evacuate area. Ventilate area of spill. Wear protective clothing and use approved respiration equipment suitable for toxic and corrosive vapors. Contain and recover liquid when possible. Absorb spilled material with activated carbon, or absorbent recommended for solvent spills and remove to a safe location for disposal by approved methods. If released to the environment, comply with all regulatory notification requirements.

Waste Disposal: In a RCRA approved facility.

### ***Section IX: Storage***

Acetic anhydride should be stored in a tightly sealed container, protected from physical damage and stored in a cool, dry, ventilated area away from sources of heat, moisture and incompatible materials.

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discretion and risk. It is the responsibility of the user to determine the product's suitability for its intended use, the product's safe use, and the product's proper disposal. Disposal of hazardous material may be subject to federal, state or local laws or regulations.

**Key:**

ca: Approximately

PEL: Permissible Exposure Level

STEL: Short Term Exposure Level

TLV: Threshold Limit Value

n/a: not available

BuAc: Butyl Acetate

TWA: Time Weighted Average

IDLH: Immediately Dangerous to Life and Health