

Common Name: **ACETYL IODIDE**

Synonyms: Ethanoyl Iodide

CAS No: 507-02-8

Molecular Formula: C<sub>2</sub>H<sub>3</sub>IO

RTK Substance No: 0017

Description: Colorless, fuming liquid which turns brown on contact with air or moisture

### HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<b>2 - Health</b> <b>1 - Fire</b> <b>1 - Reactivity</b>  <b>DOT#:</b> UN 1898 <b>ERG Guide #:</b> 156 <b>Hazard Class:</b> 8 (Corrosive)	<b>Acetyl iodide</b> may burn, but does not readily ignite. Use dry chemical or CO <sub>2</sub> as extinguishing agents. DO NOT USE WATER directly on material itself. POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Iodine vapor</i> and other <i>Iodides</i> . CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool and to knock-down vapors.	<b>Acetyl iodide</b> will react with WATER or MOISTURE to release toxic and corrosive <i>Hydrogen Iodide</i> .  <b>Acetyl iodide</b> reacts vigorously with STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE) to give off heat and may react explosively if mixed with DIISOPROPYL ETHER and other ETHERS in the presence of small amounts of METAL SALTS.  <b>Acetyl iodide</b> is corrosive to METALS.

### SPILL/LEAKS

**Isolation Distance:** 25 to 50 meters  
(75 to 150 feet)

Neutralize spilled material with crushed limestone, soda ash or lime.

### PHYSICAL PROPERTIES

**Odor Threshold:** Pungent odor  
**Flash Point:** No information  
**LEL:** No information  
**UEL:** **No information**  
**Vapor Density:** **No information**  
**Vapor Pressure:** No information  
**Water Solubility:** Decomposes  
**Boiling Point:** 221°F (105°C)

### EXPOSURE LIMITS

**OSHA:** N/A  
**NIOSH:** N/A  
**ACGIH:** N/A  
**IDLH LEVEL:** N/A

### PROTECTIVE EQUIPMENT

**Gloves:** Silver Shield®/4H® for Acetic Acid  
**Coveralls:** DuPont Tychem® Responder®, CSM, and TK for *corrosive heavy liquid chemicals*  
**Boots:** No information  
**Respirator:** Supplied Air

### HEALTH EFFECTS

**Eyes:** Irritation and burns  
**Skin:** Irritation and burns  
**Acute:** Lung irritation with coughing and shortness of breath (pulmonary edema)  
**Chronic:** Bronchitis with coughing, phlegm and/or shortness of breath

### FIRST AID AND DECONTAMINATION

**Remove** the person from exposure.  
**Flush** eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn. Seek medical attention immediately.  
**Quickly** remove contaminated clothing. Wash contaminated skin with large amounts of soap and water. Seek medical attention immediately.  
**Begin** artificial respiration if breathing has stopped and CPR if necessary.  
**Transfer** to a medical facility.  
**Medical** observation is recommended as symptoms may be delayed.