

Common Name: **ACRYLIC ACID**

Synonyms: Propene Acid; Ethylene Carboxylic Acid; Vinylformic Acid

CAS No: 79-10-7

Molecular Formula: C<sub>3</sub>H<sub>4</sub>O<sub>2</sub>

RTK Substance No: 0023

Description: Clear liquid with a sharp and irritating odor

### HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<b>3 - Health</b> <b>2 - Fire</b> <b>2 - Reactivity</b> <b>DOT#:</b> UN 2218 <b>ERG Guide #:</b> 132P <b>Hazard Class:</b> 8 (Corrosive)	<b>Acrylic Acid</b> is a COMBUSTIBLE LIQUID. Use dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam as extinguishing agents. POISONOUS GASES ARE PRODUCED IN FIRE. CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool. Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source. Vapors may travel to a source of ignition and flash back.	<b>Acrylic Acid</b> reacts with PURE NITROGEN; OXIDIZING AGENTS (such as PERCHLORATES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); and STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE). <b>Acrylic Acid</b> may polymerize explosively on contact with AMINES; AMMONIA; CHLOROSULFONIC ACID; PEROXIDES; and OLEUM, or when exposed to HEAT or DIRECT SUNLIGHT.

### SPILL/LEAKS

**Isolation Distance:**

Small Spill - 60 meters (200 feet)

Large Spill - 500 meters (1,600 feet)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in sealed containers.

Do not wash into sewer.

### PHYSICAL PROPERTIES

<b>Odor Threshold:</b>	0.06 ppm to 1 ppm
<b>Flash Point:</b>	124°F (51°C)
<b>LEL:</b>	2.0%
<b>UEL:</b>	<b>8.0%</b>
<b>Vapor Density:</b>	<b>2.5 (air = 1)</b>
<b>Relative Density:</b>	1.05 (water = 1)
<b>Vapor Pressure:</b>	3 mm Hg at 68°F (20°C)
<b>Water Solubility:</b>	Miscible
<b>Boiling Point:</b>	286°F (141°C)

### EXPOSURE LIMITS

<b>OSHA:</b>	N/A
<b>NIOSH:</b>	2 ppm, 10-hr TWA
<b>ACGIH:</b>	2 ppm, 8-hr TWA
<b>IDLH LEVEL:</b>	No information
<b>PAC LEVELS:</b>	PAC-1 = 1.5 ppm; PAC-2 = 46 ppm; PAC-3 = 180 ppm

### PROTECTIVE EQUIPMENT

<b>Gloves:</b>	Butyl, Neoprene
<b>Coveralls:</b>	DuPont Tychem® CPF-2, SL, CPF-4, Responder®, TK or F
<b>Boots:</b>	Butyl, Neoprene
<b>Respirator:</b>	>2 ppm - Full facepiece APR with OV cartridges >20 ppm - Pressure demand supplied-air

### HEALTH EFFECTS

<b>Eyes:</b>	Irritation and burns
<b>Skin:</b>	Irritation, burns and rash
<b>Acute:</b>	Nose, throat and lung irritation
<b>Chronic:</b>	Skin allergy with rash and itching

### FIRST AID AND DECONTAMINATION

**Remove** the person from exposure.

**Flush** eyes with large amounts of water for at least 30 minutes. Remove contact lenses if worn. Seek medical attention immediately.

**Quickly** remove contaminated clothing and wash contaminated skin with large amounts of water. Seek medical attention.

**Begin** artificial respiration if breathing has stopped and CPR if necessary.

**Transfer** to a medical facility.