

Common Name: **PROPYLENE GLYCOL MONOMETHYL ETHER**

Synonyms: Dowanol®; 1-Methoxy-2-Propanol; PGME

CAS No: 107-98-2

Molecular Formula: C<sub>4</sub>H<sub>10</sub>O<sub>2</sub>

RTK Substance No: 1613

Description: Colorless liquid with a sweet *Ether*-like odor

### HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<p><b>1 - Health</b></p> <p><b>3 - Fire</b></p> <p><b>0 - Reactivity</b></p> <p><b>DOT#:</b> UN 3092</p> <p><b>ERG Guide #:</b> 129</p> <p><b>Hazard Class:</b> 3 (Flammable)</p>	<p><b>FLAMMABLE LIQUID</b></p> <p>Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam as extinguishing agents.</p> <p>Water may not be effective in fighting fires.</p> <p><b>POISONOUS GASES ARE PRODUCED IN FIRE.</b></p> <p>Use water spray to keep fire-exposed containers cool.</p> <p>Vapors may travel to a source of ignition and flash back.</p> <p><b>Propylene Glycol Monomethyl Ether</b> may form an ignitable vapor/air mixture in closed tanks or containers.</p>	<p><b>Propylene Glycol Monomethyl Ether</b> may form explosive <i>Peroxides</i> during prolonged storage.</p> <p><b>Propylene Glycol Monomethyl Ether</b> is not compatible with <b>OXIDIZING AGENTS</b> (such as <b>PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE</b>); <b>STRONG ACIDS</b> (such as <b>HYDROCHLORIC, SULFURIC and NITRIC</b>); <b>ACID CHLORIDES; ACID ANHYDRIDES; ALUMINUM; COPPER; and ISOCYANATES.</b></p>

### SPILL/LEAKS

**Isolation Distance:**

Spill: 50 meters (150 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and place into sealed containers for disposal.

Use only non-sparking tools and equipment, especially when opening and closing containers of **Propylene Glycol Monoethyl Ether**.

### PHYSICAL PROPERTIES

<b>Odor Threshold:</b>	10 ppm
<b>Flash Point:</b>	90°F (32°C)
<b>LEL:</b>	1.6%
<b>UEL:</b>	18.8%
<b>Auto Ignition Temp:</b>	518°F (270°C)
<b>Vapor Density:</b>	3.1 (air = 1)
<b>Vapor Pressure:</b>	11.8 mm Hg at 77°F (25°C)
<b>Specific Gravity:</b>	0.92 (water = 1)
<b>Water Solubility:</b>	Soluble
<b>Boiling Point:</b>	248°F (120°C)
<b>Freezing Point:</b>	-139°F (-95°C)
<b>Molecular Weight:</b>	90.12

### EXPOSURE LIMITS

**NIOSH:** 100 ppm, 10-hr TWA; 150 ppm, STEL

**ACGIH:** 100 ppm, 8-hr TWA; 150 ppm, STEL

The Protective Action Criteria values are:

PAC-1 = 150 ppm PAC-2 = 300 ppm PAC-3 = 750 ppm

### PROTECTIVE EQUIPMENT

<b>Gloves:</b>	Butyl, Nitrile and Neoprene (>8-hr breakthrough)
<b>Coveralls:</b>	Tychem® BR, Responder® and TK; Trelchem® HPS and VPS (>8-hr breakthrough for <i>Dipropylene Glycol</i> )
<b>Respirator:</b>	>100 ppm - SCBA

### HEALTH EFFECTS

<b>Eyes:</b>	Irritation
<b>Skin:</b>	Irritation
<b>Inhalation:</b>	Nose, throat and lung irritation with coughing, wheezing and shortness of breath
	Headache, dizziness, lightheadedness, and passing out

### 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.

**Remove** contaminated clothing and wash contaminated skin with water.

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

**Transfer** promptly to a medical facility.