



# APTEK LABORATORIES, INC.

ISO 9001 / AS9100 Certified

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## TECHNICAL DATA & INFORMATION

### APTEK® 6108-PMF

High Temperature, Electronic/Electrical Encapsulant

#### PRODUCT DESCRIPTION

**APTEK 6108-PMF** is a premixed frozen, one component, unfilled, clear, rigid system designed for the encapsulation of electronic/electrical devices. **APTEK 6108-PMF** provides excellent environmental protection at continuous operating temperatures up to 220°C.

#### KEY FEATURES AND BENEFITS

- Fast gel time/ good hot strength for fast demold time
- High purity system to minimize potential of corrosion
- Low mixed viscosity for easy degassing and minimum bubble entrapment
- Low outgassing for space applications
- Two component version also available
- Filled thixotropic staking version available

#### HANDLING INFORMATION

Work life*, 25°C, 45% RH, 100 gms, hrs.	>4
*adversely affected by heat and humidity	
10 gm gel @100°C, minutes:	20

#### CURE SCHEDULES\*

Gel 1 hour @100°C to demold or handle parts  
+  
Post Cure 8 hours @170°C

Note: The user should determine the proper cure schedule for individual application requirements. As a guideline increased cure times will improve heat/humidity resistance without adversely effecting physical and electrical properties.

#### **- DISCLAIMER NOTICE -**

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**TYPICAL PROPERTIES**

(values not to be used for specification purposes)

<b><u>CHARACTERISTICS</u></b>	<b><u>6108-PMF</u></b>	<b><u>TEST METHOD</u></b>
Color	Clear amber	Visual
Specific gravity	1.20	ASTM D-1475 <b>APTEK 6108-PMF</b>
Viscosity @ 25°C, cps spindle/speed, rpm	2400 (#2/10 rpm)	ASTM D-1824
Flash point, °C	>200	ASTM D-92
Shelf life @ -40°C or below, mos factory sealed containers	6	
<b><u>CURED PHYSICAL PROPERTIES</u></b>	<b><u>APTEK 6108-PMF</u></b>	<b><u>TEST METHOD</u></b>
Hardness, durometer D	88	ASTM D-2240
Glass transition temp., °C	165	Perkin Elmer TMS-2
Thermal coefficient of expansion, in/in/°C	alpha 1,max. alpha 2,max.	Perkin Elmer TMS-2 Perkin-Elmer TMS-2
Outgassing @ 10 <sup>-6</sup> Torr	TML, % CVCM, %	ASTM E-595
	0.10 0.01	
<b><u>CURED ELECTRICAL PROPERTIES</u></b>	<b><u>APTEK 6108-PMF</u></b>	<b><u>TEST METHOD</u></b>
Volume resistivity @25°C, ohm-cm	>1.0 x 10 <sup>15</sup>	ASTM D-257
Dissipation factor/dielectric constant @ 25°C, 1 KHz, max.	0.009/3.3	ASTM D-150

**SAFETY AND FIRST AID**

**APTEK 6108-PMF** is safe to handle when used properly. It may cause eye irritation, possible eye damage, skin irritation and possible allergic skin reaction with direct contact. Prolonged inhalation of vapors may result in breathlessness, coughing, and irritation of mucous membranes. Avoid skin and eye contact and use in a well-ventilated area. In case of eye contact, flush profusely with fresh clean water for 15 minutes and contact a physician. For skin contact, wash thoroughly with soap and water. If inhaled, move subject to fresh air and provide fresh water to drink. If swallowed, dilute with at least one pint of water and contact physician immediately. Refer to Material Safety Data Sheet for more details.

**FOR INDUSTRIAL USE ONLY**

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