

# TECHNICAL DATA SHEET

# D72 / 6120F DAP

- DESCRIPTION** Cosmic D72 / 6120F is a short glass fiber filled, flame retardant, general purpose diallyl ortho phthalate molding compound which is supplied in a free-flowing granular form. It can be easily molded in compression, transfer, or injection equipment and can be readily preformed. It has passed NASA outgassing tests.
- FEATURES** D72 / 6120F has a high dielectric strength, low dissipation factor along with excellent flexural and tensile strength.
- APPLICATIONS** Switches, terminals, insulators, cups, cases and other applications requiring flame resistance and strength. Also useful for encapsulation of electrical and electronic components. Suitable for thin-walled parts.

PROPERTIES	SPECIFICATIONS	DATA	
MOLDING INFORMATION	Specific Gravity	1.82	
	Bulk Factor	2.5	
	Molding Temperature, °C	135 - 190	
	Molding Pressure, psi	500 - 8,000	
	Mold Shrinkage, in / in	.001 - .004	
MECHANICAL PROPERTIES	Impact Strength (Izod), ft lb/in of notch	.50 - 1.2	
	Flexural Strength, psi	13 - 15,000	
	Compressive Strength, psi	24 - 26,000	
	Tensile Strength, psi	6,000 - 10,000	
THERMAL PROPERTIES	Heat Distortion Temperature, °C	260	
	Dimensional Stability, % Max	0.01	
	Thermal Expansion, 10 <sup>-5</sup> /°C (-40°C to 100°C)	1.6	
MOISTURE PROPERTIES	Water Absorption, % 48 hrs @ 50°C	0.25	
ELECTRICAL PROPERTIES	Arc Resistance, secs	145	
	Dielectric Strength, volts / mil Kv step by step	Dry	380
		Wet	340
	Dielectric Breakdown, Kv step by step	Dry	62
		Wet	60
	Dielectric Constant, 1KHz / 1MHz	Dry	4.2 / 4.0
		Wet	4.3 / 4.2
	Dissipation Factor, 1 KHz / 1MHz	Dry	.007 / .013
		Wet	.011 / .015
	Surface Resistance, megaohms	As Is	>10 <sup>10</sup>
30 days @ 100% RH @ 70°C		10 <sup>4</sup>	
Volume Resistance, megaohms	As Is	>10 <sup>10</sup>	
	30 days @ 100% RH @ 70°C	10 <sup>4</sup>	
CERTIFICATION	MIL-M-14, ASTM D-5948-96	Type SDG-F	
	Flammability Rating	UL-94 VO 1/16	

All data is based on the best information possible and is obtained from specimens molded under carefully controlled conditions. Properties may be affected by the molding techniques applied and by the size and shape of the item molded. All information is presented without any guarantee, warranty or responsibility of any kind, expressed or implied, on Cosmic Plastics' part.