



**Cosmic Plastics Inc**  
HELPING MOLD THE FUTURE



Registered To ISO 9001:2015  
Ref. No. 10000711

## TECHNICAL DATA SHEET

**D62 / 6130F DAP**

<b>DESCRIPTION</b>	Cosmic D62 / 6130F is a long-glass fiber filled, flame retardant, general purpose diallyl ortho-phthalate molding compound which is supplied in a flake form. It can be easily molded in compression or transfer equipment, and can be readily preformed for ease in handling. It can be stored at room temperature for one year without reducing performance. It has also passed NASA outgassing tests.
<b>FEATURES</b>	D62 / 6130F is particularly suited to applications requiring resistance to elevated temperatures and high humidity. It has a high impact strength, excellent compressive and flexural strength, and very good electrical properties.
<b>APPLICATIONS</b>	Structural parts, housings, terminals, insulators and other applications requiring flame resistance or strength.

### MATERIAL INFORMATION & PROPERTIES

MOLDING INFORMATION	SPECIFICATION	DATA
Specific Gravity		1.82
Bulk Factor		6.0
Molding Pressure	psi	500 – 8,000
Molding Temperature	°C	135 - 190
Mold Shrinkage	in / in	.001 - .004

MOISTURE PROPERTIES	SPECIFICATION	DATA
Water Absorption, %	48 hrs @ 50 °C	0.30

MECHANICAL PROPERTIES	SPECIFICATION	DATA
Impact Strength	Izod notched, ft-lb/inch	3.0 – 6.0
Flexural Strength	psi	13 – 17,000
Compressive Strength	psi	24 – 30,000
Tensile Strength	psi	6 – 10,000

THERMAL PROPERTIES	SPECIFICATION	DATA
Thermal Expansion, (-40 °C to 100 °C)	10 <sup>-5</sup> / °C	2.4
Heat Distortion Temp, (°C)	18.6 kg/cm <sup>2</sup>	260
Dimensional Stability	% Max.	0.01

ELECTRICAL PROPERTIES	SPECIFICATION	DATA
Arc Resistance	seconds	180
Dielectric Strength, (Kv step-by-step)	volts/mil (Dry)	400
	volts/mil (Wet)	360
Dielectric Breakdown	Kv step-by-step (Dry)	62
	Kv step-by-step (Wet)	60
Dielectric Constant	1 KHz / 1 MHz (Dry)	4.2 / 4.0
	1 KHz / 1 MHz (Wet)	4.4 / 4.2
Dissipation Factor	1 KHz / 1 MHz (Dry)	.006 / .014
	1 KHz / 1 MHz (Wet)	.009 / .016
Volume Resistance, megaohms	As is	>10 <sup>10</sup>
	30 days @ 100% RH @70 °C	20,000
Surface Resistance, megaohms	As is	>10 <sup>10</sup>
	30 days @ 100% RH @70 °C	26,000
Water Extract Conductance	Mhos / cm x 10 <sup>-6</sup>	30

CERTIFICATIONS	SPECIFICATION	DATA
ASTM D-5948-05; (MIL-M-14)	Type	GDI-30F
Flammability	UL-94, 1/8 inch	V-0

**Technical Data Sheets are offered For Reference Only**, and are not to be considered as specifications. All tests were performed at room temperature (22 °C) unless otherwise stated, under carefully controlled conditions using transfer molded specimens. Since actual performance is determined by the molding techniques applied, as well as part size and shape, it is recommended that customers conduct their own tests to determine product suitability for their specific application. **Cosmic Plastics, Inc. makes no warranties of merchantability, or any expressed or implied guarantee or representation of fitness or suitability for any application.**

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