



**Cosmic Plastics Inc**  
HELPING MOLD THE FUTURE



Registered To ISO 9001:2008  
Ref. No. 10000711

## TECHNICAL DATA SHEET

**K43 / 6260 DAIP**

**DESCRIPTION** Cosmic K43 / 6260 is a mineral-filled, general purpose diallyl iso-phthalate molding compound which is supplied in a granular form. It pours easily, can be preformed, and molds easily in standard compression, transfer or injection equipment.

**FEATURES** K43 / 6260 has ultra-high heat resistance, exceptionally high arc resistance and is easy to mold around inserts.

**APPLICATIONS** Used for high heat and / or high humidity environments. This material makes is ideal for switches, terminals, housings, cups, cases and insulators. Also used for encapsulation of electrical and electronic components.

### MATERIAL INFORMATION & PROPERTIES

MOLDING INFORMATION	SPECIFICATION	DATA
Specific Gravity		1.80
Bulk Factor		2.3
Molding Pressure	psi	500 – 8,000
Molding Temperature	°C	135 - 170
Mold Shrinkage	in / in	.003 - .007

MOISTURE PROPERTIES	SPECIFICATION	DATA
Water Absorption, %	48 hrs @ 50 °C	0.40

MECHANICAL PROPERTIES	SPECIFICATION	DATA
Impact Strength	Izod notched, ft-lb/inch	0.35 – 0.50
Flexural Strength	psi	10 – 13,000
Compressive Strength	psi	20 – 32,000
Tensile Strength	psi	4,500 – 6,000

THERMAL PROPERTIES	SPECIFICATION	DATA
Thermal Expansion, (-40 °C to 100 °C)	10 <sup>-5</sup> / °C	4.6
Heat Distortion Temp, (°C)	18.6 kg/cm <sup>2</sup>	260
Dimensional Stability	% Max.	0.08

ELECTRICAL PROPERTIES	SPECIFICATION	DATA
Arc Resistance	seconds	180
Dielectric Strength, (Kv step-by-step)	volts/mil (Dry) volts/mil (Wet)	400 360
Dielectric Breakdown	Kv step-by-step (Dry) Kv step-by-step (Wet)	55 48
Dielectric Constant	1 KHz / 1 MHz (Dry) 1 KHz / 1 MHz (Wet)	4.6 / 4.0 4.7 / 4.0
Dissipation Factor	1 KHz / 1 MHz (Dry) 1 KHz / 1 MHz (Wet)	.035 / .031 .043 / .039
Volume Resistance, megaohms	As is 30 days @ 100% RH @70 °C	>10 <sup>10</sup> 6,000
Surface Resistance, megaohms	As is 30 days @ 100% RH @70 °C	>10 <sup>10</sup> 10 <sup>4</sup>

CERTIFICATIONS	SPECIFICATION	DATA
ASTM D-5948-05; (MIL-M-14)	Type	MIG (K43) MDG (6260)
Flammability	None	N/A

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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