

Cosmic DAP K31/6220

Diallyl Phthalate
Cosmic Plastics, Inc.

Message:

DESCRIPTION
Cosmic K31 / 6220 is a short glass fiber filled, high heat resistant 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. K31 has FDA approval for direct food contact use.

FEATURES
K31 / 6220 has good impact strength, excellent electrical properties and very high heat service properties.

APPLICATIONS
The high strength of this material makes it ideal for switches, terminals, housings, structural parts and insulators.

General Information		
Filler / Reinforcement	Glass Fiber	
Features	Food Contact Acceptable	
	General Purpose	
	Good Electrical Properties	
	Good Impact Resistance	
	Good Moldability	
	High Heat Resistance	
	High Strength	
	Isophthalic	
Uses	General Purpose	
	Housings	
	Insulation	
	Structural Parts	
	Switches	
Agency Ratings	ASTM D 5948, Type SDG	
	ASTM D 5948, Type SIG	
	FDA Food Contact, Unspecified Rating	
	MIL M-14, Type SDG	
	MIL M-14, Type SIG	
Forms	Granules	
Processing Method	Compression Molding	
	Injection Molding	
	Resin Transfer Molding	
Physical	Nominal Value	Unit

Specific Gravity	1.76	g/cm ³
Bulk Factor	2.5	
Molding Shrinkage - Flow	0.10 to 0.40	%
Dimensional Stability	< 0.010	%
Water Absorption ¹ (Equilibrium, 50°C)	0.25	%
Mechanical	Nominal Value	Unit
Tensile Strength	41.4 to 68.9	MPa
Flexural Strength	89.6 to 103	MPa
Compressive Strength	165 to 179	MPa
Impact	Nominal Value	Unit
Notched Izod Impact	27 to 64	J/m
Thermal	Nominal Value	Unit
CLTE - Flow (-40 to 100°C)	2.5E-5	cm/cm/°C
Heat Distortion	260	°C
Dielectric Breakdown		
Dry	64000	V
Wet	60000	V
Electrical	Nominal Value	Unit
Surface Resistivity		
-- ²	1.0E+10	ohms
-- ³	> 1.0E+16	ohms
Volume Resistivity		
-- ⁴	1.0E+10	ohms · cm
-- ⁵	> 1.0E+16	ohms · cm
Dielectric Strength ⁶		
Dry	16	kV/mm
Wet	16	kV/mm
Dielectric Constant		
1 kHz ⁷	4.30	
1 kHz ⁸	4.10	
1 MHz ⁹	4.10	
1 MHz ¹⁰	4.00	
Dissipation Factor		
1 kHz ¹¹	0.010	
1 kHz ¹²	6.0E-3	
1 MHz ¹³	0.015	
1 MHz ¹⁴	0.012	
Arc Resistance	180	sec
Injection	Nominal Value	Unit
Processing (Melt) Temp	135 to 170	°C
Injection Pressure	3.45 to 55.2	MPa
NOTE		

1.	48 hrs
2.	30 days @ 100% RH @ 70°C
3.	As Is
4.	30 days @ 100% RH @ 70°C
5.	As Is
6.	Method B (Step-by-Step)
7.	Wet
8.	Dry
9.	Wet
10.	Dry
11.	Wet
12.	Dry
13.	Wet
14.	Dry

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

