DECAL® 666/8/2B

Phenolic

Synres-Almoco BV

Message:

Glass-fibre reinforced phenolic moulding compound
Excellent heat resistance, low mould shrinkage and post-shrinkage, good chemical resistance and mechanical properties
Primary application(s): Commutators
This product meets the allowed upper limits for heavy metals and PCAs and also conforms to the requirements of the EU directives 2002/95 (RoHS), 2002/96 (WEEE) and 2006/122 (PFOS)

General Information	
Filler / Reinforcement	Glass Fiber
Features	Good Chemical Resistance High Heat Resistance Low Shrinkage
Uses	Electrical Parts
Agency Ratings	EU 2002/96/EC (WEEE) EU 2006/122/EC
RoHS Compliance	RoHS Compliant
Appearance	Black
Forms	Granules
Processing Method	Compression Molding Injection Molding

Physical	Nominal Value	Unit	Test Method
Density	1.80 to 1.90	g/cm³	ISO 1183
Apparent Density	0.80 to 1.00	g/cm³	ISO 60
Molding Shrinkage - Flow [1]	0.20 to 0.40	%	ISO 2577
Water Absorption (23°C, 24 hr)	< 0.20	%	ISO 62
Post Shrinkage [2]	< 0.050	%	ISO 2577
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			ISO 527-2
Compression Molded	6000 to 8000	MPa	
Injection Molded	7000 to 9000	MPa	
Tensile Stress			ISO 527-2
Compression Molded	60.0 to 80.0	MPa	
Injection Molded	70.0 to 90.0	MPa	
Flexural Modulus			ISO 178
Compression Molded	13000 to 17000	MPa	

Injection Molded	14000 to 18000	MPa	
Flexural Stress			ISO 178
Compression Molded	100 to 120	MPa	
Injection Molded	140 to 160	MPa	
Compressive Stress	200 to 250	MPa	ISO 604
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
Compression Molded	2.0 to 4.0	kJ/m^2	
Injection Molded	2.0 to 4.0	kJ/m^2	
Charpy Unnotched Impact Strength			ISO 179/1eU
Compression Molded	5.0 to 7.0	kJ/m^2	
Injection Molded	7.0 to 9.0	kJ/m^2	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
1.8 MPa, Unannealed	> 180	°C	ISO 75-2/A
8.0 MPa, Unannealed	140 to 160	°C	ISO 75-2/C
CLTE - Flow (50 to 150°C)	1.0E-5 to 1.5E-5	cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.40 to 0.60	W/m/K	ASTM E1461
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+10 to 1.0E+11	ohms	IEC 60093
Volume Resistivity	1.0E+12 to 1.0E+13	ohms·cm	IEC 60093
Electric Strength	20 to 30	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
	8.00		
100 Hz	6.00		
	6.00		
1 MHz	4.00		
Dissipation Factor			IEC 60250
100 Hz	0.010 to 0.050		
1 MHz	0.020 to 0.030		
Arc Resistance	PLC 4		ASTM D495
Comparative Tracking Index	> 200	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.50 mm, Tested by Synres-Almoco)	V-0		UL 94
Glow Wire Flammability Index	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature	960	°C	IEC 60695-2-13
NOTE			

1.	Compression Molded
2.	168 h / 110°C

Recommended distributors for this material

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