

DECAL 152CL

Phenolic

Synres-Almoco BV

Message:

Glass-fibre and mineral reinforced phenolic moulding compound

Excellent heat resistance, low mould shrinkage and post-shrinkage, good chemical resistance and mechanical properties

Primary application(s): parts under mechanical and temperature loading

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\Mineral
Features	Good Chemical Resistance
	High Heat Resistance
	Low Shrinkage
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	1.65 to 1.80	g/cm ³	ISO 1183
Apparent Density	0.60 to 0.80	g/cm ³	ISO 60
Molding Shrinkage - Flow ¹	0.30 to 0.50	%	ISO 2577
Water Absorption (23°C, 24 hr)	< 0.20	%	ISO 62
Post Shrinkage ²	< 0.20	%	ISO 2577
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-2
Compression Molded	6000 to 9000	MPa	
Injection Molded	6000 to 9000	MPa	
Tensile Stress			ISO 527-2
Compression Molded	70.0 to 90.0	MPa	
Injection Molded	90.0 to 110	MPa	
Flexural Modulus			ISO 178
Compression Molded	11000 to 13000	MPa	
Injection Molded	12000 to 14000	MPa	

Flexural Stress			ISO 178
Compression Molded	110 to 140	MPa	
Injection Molded	150 to 180	MPa	
Compressive Stress	250 to 300	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	3.0 to 5.0	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
Compression Molded	7.0 to 10	kJ/m ²	
Injection Molded	13 to 17	kJ/m ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
1.8 MPa, Unannealed	> 200	°C	ISO 75-2/A
8.0 MPa, Unannealed	> 170	°C	ISO 75-2/C
CLTE - Flow (50 to 150°C)	1.4E-5 to 1.6E-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 0.020		
1 MHz	0.020 to 0.030		
Arc Resistance	PLC 4		ASTM D495
Comparative Tracking Index	> 225	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		

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

