

Plenco 3509 Phenolic, Granular, Compression Molded

Category : Polymer , Thermoset , Filled/Reinforced Thermoset , Phenolic , Phenolic, Novolac, Mineral/Flock Filled

Material Notes:

PLENCO 03509 is a mineral and flock filled phenolic molding compound offering excellent electrical properties, dimensional stability, and improved heat resistance. UL recognized under component file E40654. 03509 is available in black or brown. Information supplied by Plenco.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Plenco-3509-Phenolic-Granular-Compression-Molded.php

Physical Properties	Metric	English	Comments
Bulk Density	0.660 g/cc	0.0238 lb/in ³	ASTM D1895
Density	1.59 g/cc	0.0574 lb/in ³	ASTM D792
Water Absorption	0.169 %	0.169 %	ASTM D570
Linear Mold Shrinkage	0.00281 cm/cm	0.00281 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell E	84	84	ASTM D785
Tensile Strength, Ultimate	55.0 MPa	7980 psi	ASTM D638
Elongation at Break	0.60 %	0.60 %	ASTM D638
Tensile Modulus	11.0 GPa	1600 ksi	ASTM D638
Flexural Strength	83.0 MPa	12000 psi	ASTM D790
Flexural Modulus	9.30 GPa	1350 ksi	ASTM D790
Compressive Strength	194 MPa	28100 psi	ASTM D695
Izod Impact, Notched	0.199 J/cm	0.373 ft-lb/in	ASTM D256
Charpy Impact, Notched	0.220 J/cm ²	1.05 ft-lb/in ²	ASTM D256
Impact	117	117	J/m Drop Ball Impact; PLENCO

Thermal Properties	Metric	English	Comments
CTE, linear	58.0 µm/m-°C	32.2 µin/in-°F	TMA; ASTM E831
	@Temperature 40.0 - 130 °C	@Temperature 104 - 266 °F	
Thermal Conductivity	0.470 W/m-K	3.26 BTU-in/hr-ft ² -°F	ASTM E1461

Thermal Properties	@Temperature 100 °C Metric	@Temperature 212 °F English	Comments
Maximum Service Temperature, Air	204 °C	399 °F	Heat Resistance; ASTM D570D
Deflection Temperature at 1.8 MPa (264 psi)	194 °C	381 °F	ASTM D648
Flammability, UL94	V-0 @Thickness 3.00 mm	V-0 @Thickness 0.118 in	
Oxygen Index	38 %	38 %	ASTM D2863
Shrinkage	0.086 %	0.086 %	72 hr, 120°C; ASTM D1299

Electrical Properties	Metric	English	Comments
Volume Resistivity	3.30e+12 ohm-cm	3.30e+12 ohm-cm	ASTM D247
Dielectric Constant	4.8	4.8	ASTM D150
Dielectric Strength	14.4 kV/mm	366 kV/in	Step by Step; ASTM D149
	17.4 kV/mm	442 kV/in	Short Time; ASTM D149
Dissipation Factor	0.0274	0.0274	ASTM D150
Arc Resistance	172 sec	172 sec	ASTM D495
Comparative Tracking Index	175 V	175 V	ASTM D3638

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China