

## Plenco 4548 Phenolic, Granular, Injection Molded

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

### Material Notes:

PLENCO 04548 is a heat resistant mineral filled phenolic molding compound, offering fast cure rates and hot rigidity. Type ASTM 5948 CFG, and UL recognized under component file E40654. 04548 is available in black and brown. Information supplied by Plenco.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Plenco-4548-Phenolic-Granular-Injection-Molded.php](http://www.lookpolymers.com/polymer_Plenco-4548-Phenolic-Granular-Injection-Molded.php)

Physical Properties	Metric	English	Comments
Bulk Density	0.660 g/cc	0.0238 lb/in <sup>3</sup>	ASTM D1895
Density	1.48 g/cc	0.0535 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.236 %	0.236 %	ASTM D570
Linear Mold Shrinkage	0.0086 cm/cm	0.0086 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell E	79	79	ASTM D785
Tensile Strength, Ultimate	54.0 MPa	7830 psi	ASTM D638
Elongation at Break	0.74 %	0.74 %	ASTM D638
Tensile Modulus	8.20 GPa	1190 ksi	ASTM D638
Flexural Strength	90.0 MPa	13100 psi	ASTM D790
Flexural Modulus	7.80 GPa	1130 ksi	ASTM D790
Compressive Strength	183 MPa	26500 psi	ASTM D695
Poissons Ratio	0.35	0.35	ASTM D638
Shear Modulus	3.04 GPa	441 ksi	Calculated
Izod Impact, Notched	0.166 J/cm	0.311 ft-lb/in	ASTM D256
Charpy Impact, Notched	0.183 J/cm <sup>2</sup>	0.871 ft-lb/in <sup>2</sup>	ASTM D256
Impact	90	90	J/m Drop Ball Impact; PLENCO

Thermal Properties	Metric	English	Comments
CTE, linear	56.0 μm/m-°C	31.1 μin/in-°F	TMA; ASTM E831
	@ Temperature 40.0 - 130 °C	@ Temperature 104 - 266 °F	

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	157 °C	315 °F	ASTM D648
Flammability, UL94	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	
Oxygen Index	26.5 %	26.5 %	ASTM D2863
Shrinkage	0.34 %	0.34 %	72 hr, 120°C; ASTM D1299

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.40e+11 ohm-cm	2.40e+11 ohm-cm	ASTM D247
Dielectric Constant	5.0	5.0	ASTM D150
Dielectric Strength	11.0 kV/mm	279 kV/in	Short Time; ASTM D149
Dissipation Factor	0.054	0.054	ASTM D150
Arc Resistance	158 sec	158 sec	ASTM D495
Comparative Tracking Index	175 V	175 V	ASTM D3638

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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