

## Plenco 5482 Phenolic, Granular, Injection Molded

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

### Material Notes:

PLENCO 05482 is an organic reinforced phenolic molding compound formulated with graphite to improve the abrasion resistance. 05482 is available in black and brown. 05482 is not recommended for electrical insulating applications. Information supplied by Plenco.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Plenco-5482-Phenolic-Granular-Injection-Molded.php](http://www.lookpolymers.com/polymer_Plenco-5482-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	1.43 g/cc	0.0517 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.30 %	0.30 %	ASTM D570
Linear Mold Shrinkage	0.0090 cm/cm	0.0090 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell E	88	88	ASTM D785
Tensile Strength, Ultimate	64.0 MPa	9280 psi	ASTM D638
Elongation at Break	0.92 %	0.92 %	ASTM D638
Tensile Modulus	8.70 GPa	1260 ksi	ASTM D638
Flexural Strength	95.0 MPa	13800 psi	ASTM D790
Flexural Modulus	7.40 GPa	1070 ksi	ASTM D790
Compressive Strength	208 MPa	30200 psi	ASTM D695
Izod Impact, Notched	0.163 J/cm	0.305 ft-lb/in	ASTM D256
Charpy Impact, Notched	0.184 J/cm <sup>2</sup>	0.876 ft-lb/in <sup>2</sup>	ASTM D256
Impact	99	99	J/m Drop Ball Impact; PLENCO

Thermal Properties	Metric	English	Comments
CTE, linear	52.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	28.9 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	TMA; ASTM E831
	@Temperature 40.0 - 130 $^{\circ}\text{C}$	@Temperature 104 - 266 $^{\circ}\text{F}$	
Thermal Conductivity	0.440 W/m-K	3.05 BTU-in/hr-ft <sup>2</sup> - $^{\circ}\text{F}$	ASTM E1461
	@Temperature 100 $^{\circ}\text{C}$	@Temperature 212 $^{\circ}\text{F}$	

Maximum Service Temperature, Air Thermal Properties	200 °C Metric	392 °F English	Heat Resistance; ASTM D570D Comments
Deflection Temperature at 1.8 MPa (264 psi)	157 °C	315 °F	ASTM D648
Oxygen Index	28.3 %	28.3 %	ASTM D2863
Shrinkage	0.30 %	0.30 %	72 hr, 120°C; ASTM D1299

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.60e+11 ohm-cm	2.60e+11 ohm-cm	ASTM D247
Dielectric Constant	5.7	5.7	ASTM D150
Dielectric Strength	9.10 kV/mm	231 kV/in	Short Time; ASTM D149
Dissipation Factor	0.050	0.050	ASTM D150
Arc Resistance	25 sec	25 sec	ASTM D495
Comparative Tracking Index	200 V	200 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