

## Plenco 4301 Phenolic, Granular, Compression Molded

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

**Material Notes:**

PLENCO 04301 is a heat resistant, mineral filled phenolic molding compound offering excellent dimensional stability and electrical properties. UL recognized under component file E40654. 04301 is available in black. Information supplied by Plenco.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Plenco-4301-Phenolic-Granular-Compression-Molded.php](http://www.lookpolymers.com/polymer_Plenco-4301-Phenolic-Granular-Compression-Molded.php)

Physical Properties	Metric	English	Comments
Bulk Density	0.660 g/cc	0.0238 lb/in <sup>3</sup>	ASTM D1895
Density	1.50 g/cc	0.0542 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.24 %	0.24 %	ASTM D570
Linear Mold Shrinkage	0.0044 cm/cm	0.0044 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell E	85	85	ASTM D785
Tensile Strength, Ultimate	56.0 MPa	8120 psi	ASTM D638
Elongation at Break	0.63 %	0.63 %	ASTM D638
Tensile Modulus	10.1 GPa	1460 ksi	ASTM D638
Flexural Strength	78.0 MPa	11300 psi	ASTM D790
Flexural Modulus	8.80 GPa	1280 ksi	ASTM D790
Compressive Strength	203 MPa	29400 psi	ASTM D695
Izod Impact, Notched	0.153 J/cm	0.287 ft-lb/in	ASTM D256
Charpy Impact, Notched	0.206 J/cm <sup>2</sup>	0.980 ft-lb/in <sup>2</sup>	ASTM D256
Impact	93	93	J/m Drop Ball Impact; PLENCO

Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.480 W/m-K @Temperature 100 °C	3.33 BTU-in/hr-ft <sup>2</sup> -°F @Temperature 212 °F	ASTM E1461
Maximum Service Temperature, Air	208 °C	406 °F	Heat Resistance; ASTM D570D
Deflection Temperature at 1.8 MPa (264 psi)	198 °C	388 °F	ASTM D648

Thermal Properties Flammability, UL94	V-0 Metric	V-0 English	Comments
	@Thickness 1.50 mm	@Thickness 0.0591 in	
Oxygen Index	32 %	32 %	ASTM D2863
Shrinkage	0.173 %	0.173 %	72 hr, 120°C; ASTM D1299

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.90e+11 ohm-cm	2.90e+11 ohm-cm	ASTM D247
Dielectric Constant	5.6	5.6	ASTM D150
Dielectric Strength	13.2 kV/mm	335 kV/in	Short Time; ASTM D149
Dissipation Factor	0.050	0.050	ASTM D150
Arc Resistance	148 sec	148 sec	ASTM D495
Comparative Tracking Index	175 V	175 V	ASTM D3638

## Contact Songhan Plastic Technology Co.,Ltd.

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