

## Plenco 2311 Phenolic, Granular, Compression Molded

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

### Material Notes:

PLENCO 02311 is a versatile general purpose organic filled phenolic molding compound offering excellent mold processability and optimized cure cycles. PLENCO 02311 is also granulated to provide improved pourability characteristics for cold powder compression molding. UL recognized under component file E40654. 02311 is available in black or brown color. Information supplied by Plenco.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Plenco-2311-Phenolic-Granular-Compression-Molded.php](http://www.lookpolymers.com/polymer_Plenco-2311-Phenolic-Granular-Compression-Molded.php)

Physical Properties	Metric	English	Comments
Bulk Density	0.580 g/cc	0.0210 lb/in <sup>3</sup>	ASTM D1895
Density	1.41 g/cc	0.0509 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.53 %	0.53 %	ASTM D570
Linear Mold Shrinkage	0.0034 cm/cm	0.0034 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell E	88	88	ASTM D785
Tensile Strength, Ultimate	55.0 MPa	7980 psi	ASTM D638
Elongation at Break	0.63 %	0.63 %	ASTM D638
Tensile Modulus	9.40 GPa	1360 ksi	ASTM D638
Flexural Strength	92.0 MPa	13300 psi	ASTM D790
Flexural Modulus	8.60 GPa	1250 ksi	ASTM D790
Compressive Strength	209 MPa	30300 psi	ASTM D695
Izod Impact, Notched	0.207 J/cm	0.388 ft-lb/in	ASTM D256
Charpy Impact, Notched	0.200 J/cm <sup>2</sup>	0.952 ft-lb/in <sup>2</sup>	ASTM D256
Impact	137	137	J/m Drop Ball Impact; PLENCO

Thermal Properties	Metric	English	Comments
CTE, linear	67.0 $\mu\text{m}/\text{m}\cdot\text{C}$	37.2 $\mu\text{in}/\text{in}\cdot\text{F}$	TMA; ASTM E831
	@Temperature 40.0 - 130 °C	@Temperature 104 - 266 °F	
Thermal Conductivity	0.410 W/m-K	2.85 BTU-in/hr-ft <sup>2</sup> -°F	ASTM E1461

Thermal Properties	@Temperature 100 °C Metric	@Temperature 212 °F English	Comments
Maximum Service Temperature, Air	196 °C	385 °F	Heat Resistance; ASTM D570D
Deflection Temperature at 1.8 MPa (264 psi)	176 °C	349 °F	ASTM D648
Flammability, UL94	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	
Oxygen Index	26 %	26 %	ASTM D2863
Shrinkage	0.233 %	0.233 %	72 hr, 120°C; ASTM D1299

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.30e+12 ohm-cm	2.30e+12 ohm-cm	ASTM D247
Dielectric Constant	5.1	5.1	ASTM D150
Dielectric Strength	14.1 kV/mm	358 kV/in	Short Time; ASTM D149
Dissipation Factor	0.045	0.045	ASTM D150
Arc Resistance	135 sec	135 sec	ASTM D495
Comparative Tracking Index	150 V	150 V	ASTM D3638

## Contact Songhan Plastic Technology Co.,Ltd.

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