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MATERIALS ENGINEERING LABORATORY DATA REPORT

Plenco 08112

Polyester BMC
compression molded

Plenco 08112 is a general purpose polyester bulk molding compound that is characterized by adding utility to a number of applications. Because of its combination of high heat resistance, good electrical properties and strength. Customers have found this material useful for such applications as iron skirts and other small appliance housings, coil bobbins, and electric motor components such as brush holders. It is available in either bulk or extruded form. Colors are available upon request. It is UL recognized under file E40654.

PROPERTY	metric		english		ASTM Test Method
Form	bmc				
Apparent Density		g/cm³		lb/ft³	D1895
Specific Gravity	2.02				D792
Mold Shrinkage*	0.0012	m/m	0.0012	in/in	D6289
Post Shrinkage 72hr 120ºC	0.00	%			D6289
Izod Impact Notched	249.4	J/m	4.67	ft·lb/in	D256
Charpy Impact Notched	231.3	J/m	4.33	ft·lb/in	D256
Drop Ball Impact		J/m		ft·lb/in	Plenco
Tensile Strength	45	MPa	6,553	psi	D638
Tensile Modulus	17,440	MPa	2,530,000	psi	D638
Tensile Elongation	0.5	%			D638
Flexural Strength	102.7	MPa	14,891	psi	D790
Flexural Modulus	15,310	MPa	2,221,000	psi	D790
Compressive Strength	137	MPa	19,941	psi	D695
Heat Resistance	224	°C	436	ºF	D794
Deflection Temperature 1.82MPa	264	°C	508	ºF	D648
Water Absorption	0.08	%			D570
Rockwell Hardness	55	M scale			D785
Dielectric Strength short time	11.6	kV/mm	294	V/mil	D149
Dissipation Factor, 1MHz	0.025				D150
Permittivity, 1MHz	5.0				D150
Volume Resistivity	7.9E+15	ohm·cm	3.1E+15	ohm·in	D257
ASTM Arc Resistance	186	sec			D495
Comparative Tracking Index	600	V			D3638
UL Flammability	HB @1.5mm				UL 94
Oxygen Index		%			D2863
Coefficient of Thermal Expansion	4.8E-05	/ºC	2.7E-05	/ºF	E831
Thermal Conductivity 100ºC	0.76	W/m/ºC	0.44	Btu/hr/ft/ºF	E1461

Limited Shelf-Life. Actual shelf-life obtained is dependent on storage conditions, molding process, and mold design. Store in cool dry place.

*Mold Shrinkage obtained under controlled laboratory conditions with relatively simple mold geometry and should be used for comparison purposes only and not for actual tool design.