

08000

Series

Polyester Bulk Molding Compounds

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Plenco's 08000 series

Plenco 08000 products are thermosetting polyester bulk molding compounds (BMC). These materials employ mineral and fiberglass additives to provide excellent impact strength, heat resistance, dimensional stability and electrical insulation.



Plenco's 08000 series data reports provide a look at many of our UL listed products' properties. However, most applications require a degree of customization to meet specific goals. Additional fiber reinforcement, UV stabilization, flame retardants, internal lubricants, color matching are just some of the ways our engineers will work with you to ensure your design is a success.

All Plenco 08000 series products can be formulated for injection, transfer or compression molding, and most are available in custom colors.

Applications

Plenco 08000 materials have been successfully applied in numerous fields including oil and gas, electrical distribution, automotive, transportation, interior lighting, consumer and commercial kitchen appliance, direct contact food service and agriculture.

Excellent electrical insulation, impact strength and heat resistance make them valued for HVAC applications and industrial buss panel and switching components. Added UV stabilization provides long-term performance for pole-mounted distribution insulators and other outdoor applications.

Their durable, glossy finish makes them well suited for appliance handles and vent trim as well as interior and automotive lighting applications.



Typical Data Sheet Property Ranges* - Plenco 08000 series

PROPERTY	ENGLISH	ASTM METHOD
Form	Granular	
Apparent Density (lb/ft ³)	N/A	D1895
Specific Gravity	1.79 - 2.03	D792
Mold Shrinkage	0.0005 - 0.004**	D955
Post Shrink	0.00%	D1299
Izod Impact-notched (ft*lb/in)	4.49 - 8.71	D 256
Charpy Impact-notched (ft*lb/in)	4.35 - 8.54	D256
Tensile Strength (psi)	6,284 - 8,115	D638
Tensile Modulus (msi)	1.9 - 2.5	D638
Tensile Elongation (%)	0.5 - 0.8	D638
Flexural Strength (psi)	14,244 - 19,563	D790
Flexural Modulus (msi)	1.8 - 2.2	D790
Compressive Strength (psi)	20,000 - 21,000	D695
Rockwell Hardness (E scale)	50 - 56	D785
Heat Resistance (°F)	425 - 462	D794
Heat Deflection - 1.82MPa (°F)	507 - 521	D648
Water Absorption (%)	0.07 - 0.10	D570
Dielectric Strength - ST (V/mil)	297 - 344	D149
Comparative Tracking Index (V)	600	D3638
ASTM Arc Resistance (sec)	185 - 192	D495
UL Flammability (@1.47mm)	HB, V-0, 5V	UL94
CTE by TMA - 40°C to 130°C (°F)	1.9 E-05 - 2.5 E-05	
Thermal Conductivity @ 212°F	0.50 - 0.56 (Btu/hr/ft/°F)	
Poisson's Ratio in Tension	0.30 - 0.31	



Please consult your Plenco Technical Sales Representative for specific material details. Fitness for use must be determined by the end user.

* Properties listed above are the range of properties available from Plenco material data sheets. The range was taken from compression molded sample data as available on www.plenco.com.

**Mold shrinkage values are generated under controlled laboratory conditions. Values provided above are for reference only and should not be used alone to design or build molds.