

**MATERIALS ENGINEERING**  
Technical Datasheet  
**PLENCO 06582**  
Two-Stage Phenolic  
transfer molded

PLENCO 06582 is a rubber modified phenolic molding compound, offering excellent heat resistant properties, along with improved mechanical strength at elevated temperatures. UL recognized under component file E40654. 06582 is available in black.

<b>PROPERTY</b>	<b>metric</b>	<b>english</b>	<b>ASTM Test Method</b>
Form	Briquette		
Apparent Density	0.65 g/cm <sup>3</sup>	40.7 lb/ft <sup>3</sup>	D1895
Specific Gravity	1.60		D792
Mold Shrinkage*	0.0011 m/m	0.0011 in/in	D6289
Post Shrinkage 72hr 120°C	0.07 %		D6289
Izod Impact Notched	47.3 J/m	0.89 ft·lb/in	D256
Charpy Impact Notched	45.5 J/m	0.85 ft·lb/in	D256
Drop Ball Impact	296 J/m	5.6 ft·lb/in	Plenco
Tensile Strength	74 MPa	10,739 psi	D638
Tensile Modulus	9,963 MPa	1,445,000 psi	D638
Tensile Elongation	0.7 %		D638
Flexural Strength	115.4 MPa	16,733 psi	D790
Flexural Modulus	8,973 MPa	1,301,000 psi	D790
Compressive Strength	157 MPa	22,757 psi	D695
Heat Resistance	233 °C	451 °F	D794
Deflection Temperature 1.82MPa	245 °C	473 °F	D648
Water Absorption	0.15 %		D570
Rockwell Hardness	45 E scale		D785
Dielectric Strength short time	13.2 kV/mm	336 V/mil	D149
Dissipation Factor, 1MHz	0.077		D150
Permittivity, 1MHz	5.8		D150
Volume Resistivity	6.3E+11 ohm·cm	2.5E+11 ohm·in	D257
ASTM Arc Resistance	120 sec		D495
Comparative Tracking Index	175 V		D3638
UL Flammability	V-0 @6.0mm		UL 94
Oxygen Index	36.4 %		D2863
Coefficient of Thermal Expansion	5.5E-05 /°C	3.0E-05 /°F	E831
Thermal Conductivity 100°C	0.43 W/m/°C	0.25 Btu/hr/ft/°F	E1461

Store in cool dry place.

*The Typical Values listed are results obtained from the testing of standard specimens using the stated test procedures, with said specimens molded under controlled laboratory conditions from representative samplings of the product. Although Plastics Engineering Company at all times reserves the right to make changes in the materials, suppliers and processing, the values listed as typical are those to be expected at the time of our manufacture. The final determination of the accuracy or completeness of any information, the suitability of the product for the use contemplated, the manner of its use, and the matter of any infringement of patents in use, are all the sole responsibility of the user. PLASTICS ENGINEERING COMPANY MAKES NO WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THIS PRODUCT, INCLUDING NO WARRANTY OF THE MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. Plastics Engineering Company reserves at all times the right to discontinue the production of any or all of its products. This is an uncontrolled copy and not subject to updates.*

\*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.