

PLASTICS ENGINEERING COMPANY

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## MATERIALS ENGINEERING LABORATORY DATA REPORT **Plenco 00755** Melamine-Phenolic

injection molded

Plenco 00755 is a melamine-phenolic copolymer molding compound offering excellent electrical and flame resistant properties. UL recognized under component file E40654. 00755 is available only in brown. 00755 was qualified under military specification MIL-M-14 (superseded by ASTM D-5948) TYPE CMG and batches can, if requested and paid for, be tested for certification to the standard.

PROPERTY				l'al-	ASTM Test Method
PROPERTY Form	met Granular		eng	lisn	Method
Apparent Density		g/cm <sup>3</sup>	35.2	lb/ft <sup>3</sup>	D1895
Specific Gravity	1.59	9/0111	00.2	10/11	D792
Mold Shrinkage*	0.0075	m/m	0.0075	in/in	D6289
Post Shrinkage 72hr 120°C	1.02			,	D6289
Izod Impact Notched	19.8		0.37	ft·lb/in	D256
Charpy Impact Notched	19.9			ft·lb/in	D256
Drop Ball Impact	119	J/m		ft·lb/in	Plenco
Tensile Strength	65	MPa	9,457	psi	D638
Tensile Modulus	10,256	MPa	1,487,000	psi	D638
Tensile Elongation	0.8	%		•	D638
Flexural Strength	95.3	MPa	13,827	psi	D790
Flexural Modulus	8,941	MPa	1,297,000	psi	D790
Compressive Strength	161	MPa	23,289	psi	D695
Heat Resistance	149	°C	301	٥F	D794
Deflection Temperature 1.82MPa	175	°C	347	٥F	D648
Water Absorption	0.34	%			D570
Rockwell Hardness	74	E scale			D785
Dielectric Strength short time	7.9	kV/mm	201	V/mil	D149
Dissipation Factor, 1MHz	0.076				D150
Permittivity, 1MHz	7.0				D150
Volume Resistivity	3.3E+12	ohm∙cm	1.3E+12	ohm∙in	D257
ASTM Arc Resistance	180	sec			D495
Comparative Tracking Index	530	V			D3638
UL Flammability	V-0 @1	I.5mm			UL 94
Oxygen Index	32.6	%			D2863
Coefficient of Thermal Expansion	6.5E-05	/⁰C	3.6E-05 /ºF		E831
Thermal Conductivity 100°C	0.56	W/m/⁰C	0.32	Btu/hr/ft/⁰F	E1461

Limited Shelf-Life. Actual shelf-life obtained is dependent on storage conditions, molding process, and mold design. 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 used 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 products on 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 company purposes only and not for actual tool design. ver 080624