

# 00700

Series

Melamine/Phenolic Molding Compounds

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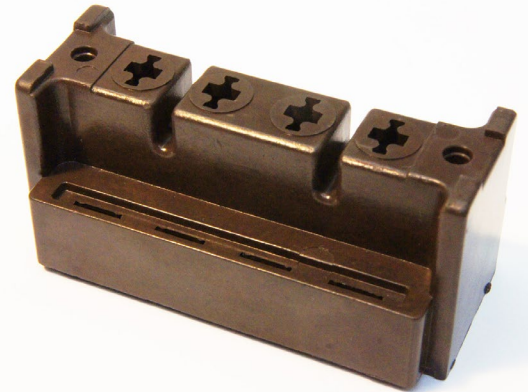


### Plenco's 00700 series

00700 Melamine/Phenolic molding materials were developed to capitalize on the heat resistance and dimensional stability of phenolic, and the superior electrical properties and surface hardness of melamine.

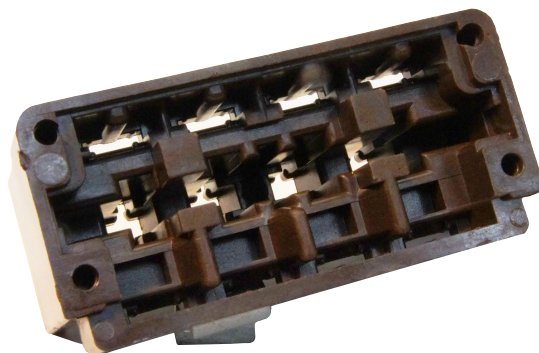
Many formulations are reinforced with organic and mineral fillers, but PTFE and other additives can be used to enhance specific properties.

Plenco 00700 materials are single-stage molding compounds that process best if used within nine months when stored at 30°C. Multiple flow grades are generally available for each product type to help optimize injection, compression and or transfer molding production.



### Applications

The combination of superior surface hardness, electrical insulation and heat resistance make Plenco 00700 materials an excellent choice for numerous markets including medical, home and commercial kitchen, industrial and consumer electrical systems, transportation and aerospace.



00700 materials have been successfully specified for medical devices that undergo repeated autoclave sterilization, aircraft interior components for their low smoke toxicity, micro-switch components and reset buttons, thermostat housings, solenoid covers, decorative food service knobs and industrial control knobs and switches.



## Typical Data Sheet Property Ranges\* - Plenco 00700 series

PROPERTY	ENGLISH	ASTM METHOD
Form	Granular	
Apparent Density (lb/ft <sup>3</sup> )	36.2 - 45.1	D1895
Specific Gravity	1.58 - 1.71	D792
Mold Shrinkage	0.0035 - 0.0094**	D955
Post Shrink	0.36% - 1.41%	D1299
Izod Impact-notched (ft*lb/in)	0.28 - 0.40	D256
Charpy Impact-notched (ft*lb/in)	0.31 - 0.45	D256
Tensile Strength (psi)	8,100 - 11,100	D638
Tensile Modulus (msi)	1.2 - 1.9	D638
Tensile Elongation (%)	0.47 - 0.95	D638
Flexural Strength (psi)	12,100 - 15,800	D790
Flexural Modulus (msi)	1.1 - 1.7	D790
Compressive Strength (psi)	20,700 - 29,700	D695
Rockwell Hardness (E scale)	66 - 86	D785
Heat Resistance (°F)	280 - 329	D794
Heat Deflection - 1.82MPa (°F)	336 - 396	D648
Water Absorption(%)	0.21 - 0.47	D570
Dielectric Strength - ST (V/mil)	137 - 342	D149
Comparative Tracking Index (V)	425 - 600	D3638
ASTM Arc Resistance (sec)	170 - 190	D495
UL Flammability (@1.47mm)	V-0	UL94
CTE by TMA - 40°C to 130°C (1/°F)	5.2 E-05 - 5.3 E-05	
Thermal Conductivity @ 212°F	0.25 - 0.54 (Btu/hr/ft/°F)	
Poisson's Ratio in Tension	0.31 - 0.36	



*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 injection, compression and transfer molded sample data as available on [www.plenco.com](http://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.