# Plenco 04300 (Compression)

### Phenolic

Plastics Engineering Co.

### Message:

PLENCO 04300 is a heat resistant, mineral filled phenolic molding compound offering optimum cure characteristics and excellent dimensional stability. It is formulated for wiring devices and electrical control applications. Type ASTM 5948 CFG, and UL recognized under component file E40654. 04300 is available in black.

Iller / Reinforcement   Mineral filler     Features   Good dimensional stability Fast curing Heat resistance, high     Uses   Electrical/Electronic Applications     Ulse Number   Electrical/Electronic Applications     Ulse Number   Electrical/Electronic Applications     Processing Method   Electrical/Electronic Applications     Processing Method   Black     Processing Method   Nominal Value     Processing Method   Nominal Value     Specific Gravity   157     Apparent Density   0,72     Molding Shrinkage - Flow   0,314     Nominal Value   Qurin <sup>1</sup> Motovell Hardness (f-Scale)   83     Rockwell Hardness (f-Scale)   83     Tensile Modulus   1100     Tensile Modulus   100     Tensile Elongation (Break)   040     Norminal Value   Mara     Tensile Modulus   1010     Tensile Modulus	General Information			
Facturing   Facturing     Heat resistance, high     Uses   factrial/Electronic Applications     Uses   factrial/Electronic Applications     Papearance   fack     Appearance   fack     Forms   Particles     Processing Method   Compression molding     Physical   Mominal Value   Qicn <sup>-1</sup> Appearance   Nominal Value   Qicn <sup>-1</sup> Physical   0.72   Qicn <sup>-1</sup> ASTM D792     Appearent Density   0.18   Qicn <sup>-1</sup> ASTM D795     Molinal Value   Vinto   ASTM D795     Hardness   Nominal Value   Vinto   ASTM D795     Molinal Value   Vinto   ASTM D795     Machanization (24 hr)   0.18   Vinto   ASTM D795     Mechanization (24 hr)   0.18   Vinto   ASTM D795     Roticell Hardness (F-Scale)   8   Ximto Machanization   ASTM D785     Tensile Modulus   1000   Machanication   ASTM D780     Tensile Strength   1010   Machanication   ASTM D780     Flexural Modulus   1010   Machanication <td>UL YellowCard</td> <td>E40654-231603</td> <td></td> <td></td>	UL YellowCard	E40654-231603		
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Forms     Particles       Processing Method     Compression molding       Physical     Nominal Value     Unit     Test Method       Specific Gravity     1.57     g/cm³     ASTM D792       Apparent Density     0.72     g/cm³     ASTM D792       Molding Shrinkage - Flow     0.31     %     ASTM D955       Mater Absorption (24 hr)     0.18     %     ASTM D570       Hardness     Nominal Value     Unit     Test Method       Rockwell Hardness (E-Scale)     83     Test Method     Motional Value     Motional Value<	UL File Number	E40654		
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Deflection Temperature Under Load (1.8 MPa, Unannealed) 190 °C ASTM D648	Notched Izod Impact	17	J/m	ASTM D256
MPa, Unannealed) 190 °C ASTM D648	Thermal	Nominal Value	Unit	Test Method
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Continuous ose remperature 204 C ASIM D794	Continuous Use Temperature	204	°C	ASTM D794

CLTE - Flow	5.2E-5	cm/cm/°C	ASTM E831
Thermal Conductivity (100°C)	0.54	W/m/K	ASTM C177
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	2.1E+12	ohms•cm	ASTM D257
Dielectric Strength <sup>1</sup>	15	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	5.10		ASTM D150
Dissipation Factor (1 MHz)	0.039		ASTM D150
Arc Resistance	180	sec	ASTM D495
Comparative Tracking Index (CTI)	200	V	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm)	V-0		UL 94
Oxygen Index	28	%	ASTM D2863
Additional Information			

The value listed as Thermal Conductivity, ASTM C177 was tested according to the ASTM E1461 standard. The value listed as Mold Shrink, Linear-Flow, ASTM D955 was tested according to the ASTM D6289 standard. The value listed as Comparative Tracking Index, UL 746 was tested according to ASTM D3638. Post Shrinkage, ASTM D6289, 72hr, 120°C: 0.12% Heat Resistance, ASTM D794: 204°C Drop Ball Impact, PLENCO Method: 98 J/m

Injection	Nominal Value	Unit
Drying Temperature	90.0	°C
Drying Time	0.50	hr
Mold Temperature	165 - 182	°C
Back Pressure	0.300	MPa
Screw Speed	< 60	rpm
Injection instructions		
Mold Close Time: 3-8 sec		
NOTE		
1.	Method A (short time)	

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#### Recommended distributors for this material

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