

Plenco 04309 (Injection)

Phenolic

Plastics Engineering Co.

Message:

PLENCO 04309 is a heat resistant, glass reinforced phenolic molding compound offering improved mechanical strength and electrical strength properties. UL recognized under component file E40654. 04309 is available in black.

General Information			
UL YellowCard	E40654-231606		
Filler / Reinforcement	Glass fiber reinforced material		
Features	Good electrical performance		
	Good strength		
	Heat resistance, medium		
UL File Number	E40654		
Appearance	Black		
Forms	Tumor		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.54	g/cm ³	ASTM D792
Apparent Density	0.64	g/cm ³	ASTM D1895
Molding Shrinkage - Flow	0.67	%	ASTM D955
Water Absorption (24 hr)	0.19	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (E-Scale)	80		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	9330	MPa	ASTM D638
Tensile Strength	48.0	MPa	ASTM D638
Tensile Elongation (Break)	0.60	%	ASTM D638
Flexural Modulus	8620	MPa	ASTM D790
Flexural Strength	80.4	MPa	ASTM D790
Compressive Strength	165	MPa	ASTM D695
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	19.1	J/m	ASTM D256
Notched Izod Impact	21	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	164	°C	ASTM D648
Continuous Use Temperature	203	°C	ASTM D794
CLTE - Flow	4.8E-5	cm/cm/°C	ASTM E831
Thermal Conductivity (100°C)	0.50	W/m/K	ASTM C177

Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	6.5E+12	ohms·cm	ASTM D257
Dielectric Strength ¹	7.9	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	6.30		ASTM D150
Dissipation Factor (1 MHz)	0.060		ASTM D150
Arc Resistance	155	sec	ASTM D495
Comparative Tracking Index (CTI)	175	V	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm)	V-0		UL 94
Oxygen Index	31	%	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: 0.19% Heat Resistance, ASTM D794: 203°C Drop Ball Impact, PLENCO Method: 139 J/m

Injection	Nominal Value	Unit
Suggested Shot Size	20 - 80	%
Rear Temperature	66.0 - 82.0	°C
Front Temperature	82.0 - 99.0	°C
Processing (Melt) Temp	104 - 115	°C
Mold Temperature	165 - 182	°C
Injection Pressure	6.20 - 11.0	MPa
Back Pressure	0.300	MPa
Screw Speed	< 60	rpm
Cushion	3.00	mm

Injection instructions

Injection Time: 3-8 sec

NOTE

- Method A (short time)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co., Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT