Electrafil® PC 04009 MB

Techmer Polymer Modifiers - *Polycarbonate*

General Information

General	
Material Status	• Commercial: Active
Availability	• North America
Features	• Electromagnetic Shielding (EMI)
Appearance	• Colors Available
Processing Method	• Injection Molding

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.41		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	10800	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	570000	psi	ASTM D790
Flexural Strength	16500	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	1.2	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	124		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	295	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	285	°F	ASTM D648
CLTE - Flow	1.8E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+5 to 1.0E+8	ohms	ASTM D257
Volume Resistivity	1.0E+5 to 1.0E+8	ohms·cm	ASTM D257
Shielding Effectiveness - 30 to 1000 MHz	20	dB	ASTM D4935
Static Decay	< 2.00		FTMS 101B
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.13 in)	V-1		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	575 to 600	°F
Middle Temperature	600 to 630	°F
Front Temperature	590 to 620	°F
Nozzle Temperature	590 to 620	°F
Processing (Melt) Temp	580 to 620	°F
Mold Temperature	160 to 190	°F
Injection Rate	Moderate	
Back Pressure	0.00 to 100	psi

Injection Notes

Screw Speed: Medium
Recommendations for Molding and Tool Conditions: Well vented mold
Moisture Content, as received: Product is packaged at 0.2% or less.

Notes

[1] Typical properties: these are not to be construed as specifications.