

Electrafil® ABS 03106 MB

Techmer Polymer Modifiers - Acrylonitrile Butadiene Styrene

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Stainless Steel Fiber
Features	• Electromagnetic Shielding (EMI)
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.00		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.017	in/in	ASTM D955
Water Absorption (24 hr)	0.010	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	4700	psi	ASTM D638
Tensile Elongation (Yield)	10	%	ASTM D638
Flexural Modulus	165000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.0	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	80		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	130	°F	ASTM D648
CLTE - Flow	4.5E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0 to 1.0E+2	ohms	ASTM D257
Volume Resistivity	1.0 to 1.0E+2	ohms·cm	ASTM D257
Shielding Effectiveness ²	50	dB	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	170 to 190	°F
Drying Time	2.0 to 16	hr
Rear Temperature	420 to 450	°F
Middle Temperature	430 to 460	°F
Front Temperature	410 to 430	°F
Nozzle Temperature	390 to 430	°F
Processing (Melt) Temp	450 to 500	°F
Mold Temperature	160 to 190	°F

Notes

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

² 30 to 1000 MHz

