

Electrafil® ABS 03011 FR BK MB

Techmer Polymer Modifiers - *Acrylonitrile Butadiene Styrene*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Stainless Steel Fiber, 15% Filler by Weight
Features	• Electromagnetic Shielding (EMI) • Flame Retardant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.33		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	6900	psi	ASTM D638
Tensile Elongation (Yield)	2.0	%	ASTM D638
Flexural Modulus	900000	psi	ASTM D790
Flexural Strength	11800	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	0.70	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	3.0	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	285	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0 to 1.0E+3	ohms	ASTM D257
Volume Resistivity	1.0 to 1.0E+3	ohms·cm	ASTM D257
EMI Attenuation	55	dB	ASTM D4935
Static Decay	< 0.1	sec	FTMS 101B
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94
Additional Information	Nominal Value	Unit	Test Method
TPCI #	7965121		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	160 to 180	°F
Drying Time	2.0 to 16	hr
Rear Temperature	410 to 440	°F
Middle Temperature	420 to 450	°F
Front Temperature	400 to 420	°F
Nozzle Temperature	380 to 420	°F
Processing (Melt) Temp	440 to 490	°F
Mold Temperature	150 to 180	°F

