

Electrafil® HDPE 04001 LE BK

Techmer Polymer Modifiers - *High Density Polyethylene*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Filler
Features	• Conductive • ESD Protection
Agency Ratings	• FDA
Appearance	• Black
Forms	• Pellets
Processing Method	• Extrusion

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.990		ASTM D792
Molding Shrinkage - Flow (0.125 in)	8.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	4300	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	220000	psi	ASTM D790
Flexural Strength	8000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	3.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	4.5	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	250	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	165	°F	ASTM D648
CLTE - Flow	4.7E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+4 to 1.0E+6	ohms	ASTM D257
Volume Resistivity	1.0E+4 to 1.0E+6	ohms·cm	ASTM D257
Shielding Effectiveness ²	40	dB	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Notes

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

² 30 to 1000 MHz

