Electrafil® ABS 03008

Acrylonitrile Butadiene Styrene

Techmer Engineered Solutions

Message:

Electrafil® ABS 03008 is an Acrylonitrile Butadiene Styrene (ABS) product filled with stainless steel fiber. It can be processed by injection molding and is available in North America. Characteristics include: Flame Rated Conductive

Filler / Reinforcement Stainless Steel Fiber Features Statically Conductive Apparance Colors Available Forms Pellets Processing Method Injection Molding Physical Nominal Value Unit Specific Gravity 1.0 g/cm² Molding Shrinkage - Flow (3.18 mm) 0.50 % Modeling Shrinkage - Flow (3.18 mm) 0.28 % Machanical Nominal Value Unit Tensile Strength (Yield) 50.3 MPa Machanical Nominal Value Unit Tensile Strength (Yield) 50.3 MPa Strength (Yield) 50.3 MPa Moral Strength 89.6 MPa Inspact Nominal Value Unit Inspact Nominal Value MPa Inspact Nominal Value MPa Inspact Nominal Value Unit Inspact Nominal Value Unit Notched Izod Impact (23*C, 3.18 mm) 59 J/m Notched Izod Impact (3.18 mm) 240 J/m O45 MPa, Unanceled 102 *C Ital MPa, Unanceled 102 *C Ital MPa, Unanceled 56.5 cm/cm/CC<	General Information			
AppearanceColors AvailableFormsPelletsProcessing MethodInjection MoldingPhysicalNominal ValueUnitPhysicalNominal ValueUnitSpecific Gravity1.10g/cm³Molding Shrinkage - Flow (3.18 mm)0.50%Olding Shrinkage - Flow (3.18 mm)0.50%MachancialNominal Value%MachancialNominal ValueWithTensile Strength (Yield)0.3MPaTensile Strength (Yield)3.00MPaPesural Modulus3100MPaFlexural Modulus300MPaNotched Izod Impact (23°C, 3.18 mm)59//mNotched Izod Impact (23°C, 3.18 mm)240//mMonthal ValueUnitTest MethodPeteroriV//mStrength69.6//mNotched Izod Impact (23°C, 3.18 mm)59//mMothed Izod Impact (23°C, 3.18 mm)240//mMothed Izod Impact (23°C, 3.18 mm)6.1//mMothed Izod Impact (2	Filler / Reinforcement	Stainless Steel Fiber		
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MechanicalNominal ValueUnitTest MethodTensile Strength (Yield)50.3MPaASTM D638Tensile Elongation (Yield)4.0%ASTM D638Flexural Modulus3100MPaASTM D790Flexural Strength89.6MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.18 mm)59J/mASTM D256Unnotched Izod Impact (3.18 mm)240J/mASTM D256Deflection Temperature Under LoadVinitTest MethodDeflection Temperature Under Load102°CSTM D6480.45 MPa, Unannealed102°CSTM D6961.8 MPa, Unannealed96.1°CStM D696ElectricalNominal ValueUnitTest MethodSurface Resistivity10E+4 to 1.0E+6ohms cmASTM D257Volume Resistivity10E+4 to 1.0E+6ohms cmASTM D257Shielding Effectiveness ¹ 40dBASTM D257Shielding Effectiveness ¹ HBUnitTest MethodFlarmabilityNominal ValueUnitTest Method<	Molding Shrinkage - Flow (3.18 mm)	0.50	%	ASTM D955
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CLTE - Flow8.5E-5cm/cm/°CASTM D696ElectricalNominal ValueUnitTest MethodSurface Resistivity1.0E+4 to 1.0E+6ohms · cmASTM D257Volume Resistivity1.0E+4 to 1.0E+6ohms · cmASTM D257Shielding Effectiveness ¹ 40dBASTM D149FlammabilityNominal ValueUnitTest MethodFlame Rating (1.50 mm)HBUnitUl 94InjectionNominal ValueUnitUnit	0.45 MPa, Unannealed	102	°C	
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Shielding Effectiveness 140dBASTM D149FlammabilityNominal ValueUnitTest MethodFlame Rating (1.50 mm)HBUl 94InjectionNominal ValueUnit	Surface Resistivity	1.0E+4 to 1.0E+6	ohms	ASTM D257
FlammabilityNominal ValueUnitTest MethodFlame Rating (1.50 mm)HBUL 94InjectionNominal ValueUnitUL 94	Volume Resistivity	1.0E+4 to 1.0E+6	ohms•cm	ASTM D257
Flame Rating (1.50 mm) HB UL 94 Injection Nominal Value Unit	Shielding Effectiveness ¹	40	dB	ASTM D149
Injection Nominal Value Unit	Flammability	Nominal Value	Unit	Test Method
	Flame Rating (1.50 mm)	НВ		UL 94
Drying Temperature 76.7 to 87.8 °C	Injection	Nominal Value	Unit	
	Drying Temperature	76.7 to 87.8	°C	

Drying Time	2.0 to 16	hr	
Rear Temperature	216 to 232	°C	
Middle Temperature	221 to 238	°C	
Front Temperature	210 to 221	°C	
Nozzle Temperature	199 to 221	°C	
Processing (Melt) Temp	232 to 260	°C	
Mold Temperature	71.1 to 87.8	°C	
NOTE			
1.	30 to 1000 MHz		

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