

InElec® ABSCF20

Americhem - Acrylonitrile Butadiene Styrene

General Information

Product Description

20% CARBON FIBER REINFORCED ABS

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight		
Features	• Electrically Conductive • ESD Protection • Filled	• Good Dimensional Stability • High Stiffness • High Strength	• Permanent Antistatic
Uses	• Consumer Applications • Electrical/Electronic Applications	• Household Goods • Industrial Applications	• Industrial Parts
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.14	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	15500	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	1.70E+6	psi	ASTM D790
Flexural Strength	22000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.2	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	5.6	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	215	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+2 to 1.0E+6	ohms	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	170	°F
Drying Time	4.0	hr
Processing (Melt) Temp	400 to 550	°F
Mold Temperature	180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

Notes

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

