

InStruc® ABSGF20MD

Americhem - Acrylonitrile Butadiene Styrene

General Information

Product Description

20% GLASS FIBER REINFORCED,ACRYLONITRILE BUTADIENE STYRENE (ABS)LOCKED FORMULATION FOR MEDICAL USAGE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Stiffness • High Strength	
Uses	• Electrical/Electronic Applications • Housings	• Industrial Parts • Medical/Healthcare Applications	• Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	950000	psi	ASTM D638
Tensile Strength	11000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	900000	psi	ASTM D790
Flexural Strength	16000	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)	5.0	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	200	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0	hr
Suggested Max Moisture	0.10	%
Processing (Melt) Temp	460 to 500	°F
Mold Temperature	150 to 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.

