

AuroraTec™ PSU20GF-10319

Aurora Material Solutions, LLC - Polysulfone

General Information

Product Description

AuroraTec™ PSU20GF-10319 is a 20% fiberglass reinforced, high temperature, natural Polyethersulfone (PSU) injection molding grade that is suitable for continuous temperatures of up to 300 F (149 C).

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Latin America • Europe • North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Features	• High Temperature Strength
Uses	• Automotive Applications • Electrical/Electronic Applications
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.40		ASTM D792
Melt Mass-Flow Rate (MFR) (343°C/2.16 kg)	7.0	g/10 min	ASTM D1238
Water Absorption (Saturation, 73°F)	0.24	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	16900	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	834000	psi	ASTM D790
Flexural Strength	21200	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.4	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	366	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	280	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	625 to 680	°F
Middle Temperature	625 to 680	°F
Front Temperature	625 to 680	°F
Nozzle Temperature	650 to 735	°F
Mold Temperature	210 to 300	°F
Injection Rate	Moderate	
Back Pressure	50.0 to 200	psi
Screw Speed	60 to 90	rpm

