

Radilon® S ERV100 FR2 333 BK

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 10% glass fiber reinforced flame retardant injection moulding grade. Halogen and phosphorus free. Toughened. Black colour.

Suitable for parts requiring improved impact strength along with enhanced stiffness Rated V-2 according to UL-94.

General

Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Additive	• Flame Retardant • Impact Modifier
Features	• Flame Retardant • Halogen Free • Low (to None) Phosphorus Content • Good Stiffness • Impact Modified
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-GF30 FR(30)

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.22	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.80	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	6.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.9	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	718000	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	14500	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	4.0	--	%	ISO 527-2/1A/5
Flexural Modulus ²	653000	--	psi	ISO 178
Flexural Stress ²	22500	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
73°F	2.4	--	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	26	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature ³	424	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	1.0E+11	ohms·m	IEC 62631-3-1

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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
Flame Rating (0.031 in)	V-2	--		UL 94

Processing Information

Injection	Dry	Unit
Drying Temperature - Desiccant Dryer	176	°F
Drying Time - Desiccant Dryer	2.0 to 4.0	hr
Dew Point - Desiccant Dryer	< -4	°F
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	464 to 536	°F
Mold Temperature	176 to 194	°F
Injection Rate	Moderate-Fast	

Notes

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

² 0.079 in/min

³ 10°C/min