

Radilon® S RV200 FR2 100 NT

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 20% Glass Fibre reinforced flame retardant injection moulding grade. Halogen and phosphorus free. Natural colour

Suitable for parts requiring fire retardancy along with improved stiffness. Rated V-2 according to UL-94.

General

Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Additive	• Flame Retardant
Features	<ul style="list-style-type: none"> • Flame Retardant • Good Stiffness • Halogen Free • Low (to None) Phosphorus Content
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-GF20 FR(30)

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.32	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.90	--	%	
Flow	0.40	--	%	
Water Absorption				ISO 62
Saturation, 73°F	6.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.8	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	769000	406000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	10900	6090	psi	ISO 527-2/1A/5
Tensile Strain (Break)	7.5	12	%	ISO 527-2/1A/5
Flexural Modulus ²	725000	--	psi	ISO 178
Flexural Stress ²	19600	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	29	48	ft-lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	329	--	°F	
Vicat Softening Temperature	410	--	°F	ISO 306/B50
Melting Temperature ³	428	--	°F	ISO 11357-3

Radilon® S RV200 FR2 100 NT

Radici Group High Performance Polymers - Polyamide 6

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
Comparative Tracking Index				IEC 60112
Solution A	600	--	V	
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
Glow Wire Flammability Index				IEC 60695-2-12
0.08 in	1760	--	°F	

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