

Radilon® S RV300 FR2 100 NT

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 30% glass fibre reinforced flame retardant injection moulding grade. Halogen and phosphorus free. Natural colour.

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

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
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
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-GF30 FR(30)

Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.80	--	%	
Flow	0.30	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	5.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.3	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.07E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	13800	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	5.2	--	%	ISO 527-2/1A/5
Flexural Modulus ²	1.00E+6	--	psi	ISO 178
Flexural Stress ²	23900	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
73°F	1.9	--	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	26	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	401	--	°F	
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	347	--	°F	
Vicat Softening Temperature	419	--	°F	ISO 306/B50

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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
Comparative Tracking Index Solution A	600	--	V	IEC 60112
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
0.04 in	1760	--	°F	
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