

Radilon® S RV350X2N 333 BK

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 35% glass fibre reinforced injection moulding grade with enhanced thermal resistance in contact with hot air. Electrically neutral and DPPD free. Outstanding mechanical properties retention versus standard polyamide 6 after heat ageing. Black colour.

Suitable for parts requiring high stiffness, good mechanical resistance and excellent heat ageing properties retention.

General

Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Features	• Good Heat Resistance	• Heat Aging Resistant	• High Stiffness
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA6-GF35		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.40	--	g/cm ³	ISO 1183
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	6.4	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.8	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.61E+6	1.06E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	26100	16700	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.5	8.0	%	ISO 527-2/1A/5
Flexural Modulus ²	1.42E+6	928000	psi	ISO 178
Flexural Stress ²	40600	24700	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	4.8	7.6	ft·lb/in ²	
73°F	6.7	10	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	33	43	ft·lb/in ²	
73°F	41	48	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/B
66 psi, Unannealed	428	--	°F	
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	392	--	°F	
Melting Temperature ³	428	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	--	ohms	IEC 62631-3-2

Radilon® S RV350X2N 333 BK

Radici Group High Performance Polymers - Polyamide 6

Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity (500 V)	1.0E+13	--	ohms·m	IEC 62631-3-1
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795

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