

Radilon® S RV300K 333 BK

 Radici Group High Performance Polymers - *Polyamide 6*
General Information
Product Description

PA6 30% glass fiber reinforced injection moulding grade. Heat stabilized. Black colour.

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

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Aging Resistant • Heat Stabilized • Medium Stiffness
Uses	• Automotive Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• FORD WSK-M4D664-A2 • GM GMW3029P-PA6-GF30H • FORD WSS-M4D993-B1 • IMDS ID 10207405 Color: 333 Black
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-T GF30

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm ³	ISO 1183
Molding Shrinkage ²				ISO 294-4
Across Flow	0.80	--	%	
Flow	0.30	--	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.5	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	2.0	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.38E+6	885000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	24700	15200	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.5	6.0	%	ISO 527-2/1A/5
Flexural Modulus ³	1.25E+6	--	psi	ISO 178
Flexural Stress ³	37700	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	4.3	--	ft·lb/in ²	
73°F	5.2	7.1	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	33	--	ft·lb/in ²	
73°F	38	48	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	419	--	°F	ISO 75-2/Bf
Deflection Temperature Under Load (264 psi, Unannealed)	392	--	°F	ISO 75-2/Af
Vicat Softening Temperature	410	--	°F	ISO 306/B50



Melting Temperature ⁴	428	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity ⁵	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity ⁵	1.0E+15	1.0E+13	ohms·cm	IEC 62631-3-1
Comparative Tracking Index (Solution A)	500	--	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)	HB	--		UL 94
Glow Wire Flammability Index (0.08 in)	1200	--	°F	IEC 60695-2-12
Glow Wire Ignition Temperature (0.08 in)	1340	--	°F	IEC 60695-2-13

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.
- ² 280°C Melt Temperature/ 90°C Mold Temperature/ 60 MPa Cavity Pressure
- ³ 0.079 in/min
- ⁴ 10°C/min
- ⁵ 500V

