

**Radilon® S RV150K 333 BK**

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

PA6 15% glass fiber reinforced injection moulding grade. Heat stabilized. Black colour.

Suitable for parts requiring improved stiffness and good heat ageing resistance.

**General**

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Additive	• Heat Stabilizer
Features	• Good Stiffness • Heat Aging Resistant • Heat Stabilized
Uses	• Automotive Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• GM GMW3029P-PA6-GF15H
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-T GF15

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Density	1.23	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>				ISO 294-4
Across Flow	1.1	--	%	
Flow	0.40	--	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	8.5	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	2.5	--	%	ISO 62
<b>Mechanical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Modulus	856000	508000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	17400	10200	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.7	12	%	ISO 527-2/1A/5
Flexural Modulus <sup>3</sup>	740000	392000	psi	ISO 178
Flexural Stress <sup>3</sup>	26800	18100	psi	ISO 178
<b>Impact</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	2.4	--	ft·lb/in <sup>2</sup>	
73°F	2.9	5.2	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	17	--	ft·lb/in <sup>2</sup>	
73°F	19	31	ft·lb/in <sup>2</sup>	
<b>Thermal</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (264 psi, Unannealed)	374	--	°F	ISO 75-2/Af
Vicat Softening Temperature	401	--	°F	ISO 306/B50
Melting Temperature <sup>4</sup>	428	--	°F	ISO 11357-3
<b>Electrical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity <sup>5</sup>	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity <sup>5</sup>	1.0E+15	1.0E+13	ohms·cm	IEC 62631-3-1



Comparative Tracking Index (Solution A)	500	--	V	IEC 60112
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
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)	1290	--	°F	IEC 60695-2-12

### 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

- <sup>1</sup> Typical properties: these are not to be construed as specifications.
- <sup>2</sup> 280°C Melt Temperature/ 90°C Mold Temperature/ 60 MPa Cavity Pressure
- <sup>3</sup> 0.079 in/min
- <sup>4</sup> 10°C/min
- <sup>5</sup> 500V

