

**Radilon® A RV350K 333 BK**

 Radici Group High Performance Polymers - *Polyamide 66*
**General Information**
**Product Description**

PA66 35% glass fiber reinforced injection moulding grade. Heat stabilized. Black colour.

Suitable for parts requiring high 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, 35% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Aging Resistant	• Heat Stabilized	• High Stiffness
Uses	• Automotive Applications		
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• GM GMW3038P-PA66-GF35H	• IMDS ID 51256520 Color: 333 Black	
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66-T GF35		

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

Physical	Dry	Conditioned	Unit	Test Method
Density	1.40	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.30	--	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	6.3	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	1.5	--	%	ISO 62
Viscosity Index - Sulfuric Acid	4150	--	in <sup>3</sup> /lb	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.62E+6	1.10E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	26800	17400	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	3.5	%	ISO 527-2/1A/5
Flexural Modulus <sup>3</sup>	1.46E+6	1.03E+6	psi	ISO 178
Flexural Stress <sup>3</sup>	40600	24700	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	5.2	6.7	ft·lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	38	48	ft·lb/in <sup>2</sup>	ISO 179/1eU
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	455	--	°F	ISO 75-2/1Af
Vicat Softening Temperature	473	--	°F	ISO 306/B50
Melting Temperature <sup>4</sup>	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	1.3E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	5.4E-5	--	in/in/°F	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
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	536 to 572 °F
Mold Temperature	176 to 212 °F
Injection Rate	Moderate-Fast

### Notes

- <sup>1</sup> Typical properties: these are not to be construed as specifications.
- <sup>2</sup> 300°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

