

# Radilon® A RV300RKC 306 BK

## Radici Group High Performance Polymers - Polyamide 66

### General Information

#### Product Description

PA66 30% glass fiber reinforced injection moulding grade. Heat stabilized. Black colour.

Suitable for parts requiring high stiffness and good mechanical resistance. Good resistance to hydrolysis. Product specifically intended for applications in civil and industrial water management sector. Suitable and approved for drinking water and foodstuff contact.

#### General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Heat Stabilizer
Features	• Food Contact Acceptable • High Stiffness • Heat Stabilized • Hydrolysis Resistant
Uses	• Potable Water Applications
Agency Ratings	• BS 6920 • EU 2011/65/EC • DVGW W270 • KTW
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-GF30

### Properties <sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.30	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	6.2	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.6	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.38E+6	1.09E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	25400	18900	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.3	5.0	%	ISO 527-2/1A/5
Flexural Modulus <sup>2</sup>	1.26E+6	943000	psi	ISO 178
Flexural Stress <sup>2</sup>	38400	29700	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	4.3	--	ft·lb/in <sup>2</sup>	
73°F	4.8	7.1	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	29	--	ft·lb/in <sup>2</sup>	
73°F	33	40	ft·lb/in <sup>2</sup>	

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed	491	--	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	473	--	°F	ISO 75-2/Af
Vicat Softening Temperature	482	--	°F	ISO 306/B50
Melting Temperature <sup>3</sup>	500	--	°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	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	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> 0.079 in/min

<sup>3</sup> 10°C/min