

Radilon® A RV300RKC2 306 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 30% glass fiber reinforced injection moulding grade. Improved resistance to disinfectants. Heat stabilized. Drinking water and food contact. Black colour.

Product with good resistance to hydrolysis and improved resistance to disinfectants, specifically intended for use in applications in civil and industrial water management as well as appliances, requiring high stiffness and good mechanical resistance.

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Heat Stabilizer
Features	• Food Contact Acceptable • Heat Stabilized • High Stiffness • Hydrolysis Resistant
Uses	• Potable Water Applications
Agency Ratings	• EU 2011/65/EC • FDA 21 CFR 177.1500 Chapter 1
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-GF30

Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm ³	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	1.42E+6	1.13E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	25400	19600	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.2	5.0	%	ISO 527-2/1A/5
Flexural Modulus ²	1.33E+6	928000	psi	ISO 178
Flexural Stress ²	39200	29700	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	4.8	7.1	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	31	--	ft·lb/in ²	
73°F	37	43	ft·lb/in ²	

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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	491	--	°F	ISO 306/B50
Melting Temperature ³	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
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

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min

³ 10°C/min