

Radilon® A CF200 333 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 20% carbon fiber reinforced injection moulding grade. Black colour.

Suitable for parts and components requiring very high mechanical properties: stiffness, dimensional stability, fatigue and creep resistance. The presence of carbon fibers also provides higher electrical and thermal conductivity.

General

Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight		
Features	• Creep Resistant	• Fatigue Resistant	• High Stiffness
	• Electrically Conductive	• High Dimensional Stability	• Thermally Conductive
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66-CF20		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.22	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.50	--	%	
Flow	0.20	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	6.0	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.7	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	2.41E+6	1.48E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	31900	21800	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.3	3.5	%	ISO 527-2/1A/5
Flexural Modulus ²	2.00E+6	--	psi	ISO 178
Flexural Stress ²	45000	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	26	36	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature ³	500	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity (500 V)	1.0E+2	1.0E+2	ohms·m	IEC 62631-3-1
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	< 0.39	--	in/min	ISO 3795
Flame Rating	HB	--		UL 94

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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	0.10	%
Processing (Melt) Temp	536 to 572	°F
Mold Temperature	176 to 212	°F
Injection Rate	Moderate	

Notes

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

² 0.079 in/min

³ 10°C/min