

Radilon® A RV450W 333 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 43% glass fiber reinforced injection moulding grade, heat stabilized. Black colour

Suitable for parts requiring high stiffness and good mechanical resistance and good heat ageing properties retention

General

Filler / Reinforcement	• Glass Fiber, 43% 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
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-T GF43

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.50	g/cm ³	ISO 1183
Molding Shrinkage ²			ISO 294-4
Across Flow	0.80	%	
Flow	0.30	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	5.5	%	ISO 62
Water Absorption			ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.3	%	
Viscosity Index - Sulfuric Acid	3880	in ³ /lb	ISO 307
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.06E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	34200	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.9	%	ISO 527-2/1A/5
Flexural Modulus ³	1.99E+6	psi	ISO 178
Flexural Stress ³	51200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.7	ft·lb/in ²	
73°F	8.1	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	40	ft·lb/in ²	
73°F	41	ft·lb/in ²	
Notched Izod Impact Strength (73°F)	7.3	ft·lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	491	°F	ISO 75-2/Bf

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	482	°F	ISO 75-2/Af
Vicat Softening Temperature	482	°F	ISO 306/B50
Melting Temperature ⁴	500	°F	ISO 11357-3

Processing Information

Injection	Nominal Value	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-Fast	

Notes

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

² 300°C Melt Temperature/ 90°C Mold Temperature/ 60 MPa Cavity Pressure

³ 0.079 in/min

⁴ 10°C/min