

Radilon® A RV330 3733 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 33% glass fiber reinforced injection moulding grade, black colour

Suitable for parts requiring high stiffness and good impact resistance

General

Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Features	• Good Impact Resistance • 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-GF33

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm ³	ISO 1183
Molding Shrinkage ²			ISO 294-4
Across Flow	0.90	%	
Flow	0.30	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.0	%	ISO 62
Water Absorption			ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.7	%	
Viscosity Index - Sulfuric Acid	3880	in ² /lb	ISO 307
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.41E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	25400	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	%	ISO 527-2/1A/5
Flexural Modulus ³	1.19E+6	psi	ISO 178
Flexural Stress ³	37000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.2	ft·lb/in ²	
73°F	5.7	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	29	ft·lb/in ²	
73°F	33	ft·lb/in ²	
Notched Izod Impact Strength (73°F)	4.8	ft·lb/in ²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	36	ft·lb/in ²	ISO 180/1U

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	482	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	455	°F	ISO 75-2/Af
Vicat Softening Temperature	473	°F	ISO 306/B50
Melting Temperature ⁴	500	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	1.4E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	5.0E-5	in/in/°F	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	HB		UL 94
Glow Wire Flammability Index (0.08 in)	1290	°F	IEC 60695-2-12

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