

Radilon® A RV300LW 333 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 30% glass fiber reinforced injection moulding grade. Lubricated, heat stabilized. Black colour.

Suitable for parts requiring high stiffness. Excellent heat ageing properties retention. Particularly apt for automotive "under the hood" applications.

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Aging Resistant • High Stiffness • Heat Stabilized • Lubricated
Uses	• Automotive Applications • Automotive Under the Hood
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-T GF30

Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm ³	ISO 1183
Molding Shrinkage ²				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.30	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	7.0	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.7	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.38E+6	943000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	24700	17400	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.5	6.0	%	ISO 527-2/1A/5
Flexural Modulus ³	1.23E+6	798000	psi	ISO 178
Flexural Stress ³	37700	23200	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	5.2	7.1	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	31	--	ft·lb/in ²	
73°F	36	48	ft·lb/in ²	

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed	482	--	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	464	--	°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)	5.3E-5	--	in/in/°F	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity ⁵	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity ⁵	1.0E+15	1.0E+13	ohms·cm	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.
- ² 300°C Melt Temperature/ 90°C Mold Temperature/ 60 MPa Cavity Pressure
- ³ 0.079 in/min
- ⁴ 10°C/min
- ⁵ 500V