Radilon® A RV350W 3008 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 35% glass fiber reinforced injection moulding grade, heat stabilized. Black colour

Suitable for parts requiring high stiffness and good mechanical resistance and excellent heat ageing properties retention. Can be empolyed in laser welding processes as laser-transparent material.

General			
Filler / Reinforcement	• Glass Fiber, 35% 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 GF35		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.42	--	g/cm³	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	5.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.6	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.69E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	30500	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	--	%	ISO 527-2/1A/5
Flexural Modulus [3]	1.52E+6	--	psi	ISO 178
Flexural Stress [3]	45700	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	5.7	--	ft·lb/in²	
73°F	6.7	--	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	34	--	ft·lb/in²	
73°F	40	--	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	482	--	°F	

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Thermal	Dry	Conditioned	Unit	Test Method
Vicat Softening Temperature	482	--	°F	ISO 306/B50
Melting Temperature [4]	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 [5]	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				IEC 60695-2-12
0.08 in	1290	--	°F	

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] 500 V