Radilon® A RV300W 100 NT

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 30% glass fiber reinforced injection moulding grade. Heat stabilized. Natural colour.

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

General			
Filler / Reinforcement	• Glass Fiber, 30% 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	• Natural Color		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66-T GF30		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.35	--	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	6.2	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.6	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.38E+6	1.09E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	27600	18900	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.5	6.5	%	ISO 527-2/1A/5
Flexural Modulus [3]	1.25E+6	--	psi	ISO 178
Flexural Stress [3]	41300	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	5.2	--	ft·lb/in²	
73°F	6.2	9.5	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	33	--	ft·lb/in²	
73°F	43	48	ft·lb/in²	

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	482	--	°F	
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	464	--	°F	
Vicat Softening Temperature	482	--	°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	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	0.10	%
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

[5] 500V