

# Radilon® A RV300LW 100 NT

## Radici Group High Performance Polymers - Polyamide 66

### General Information

#### Product Description

PA66 30% glass fiber reinforced injection moulding grade. Lubricated, heat stabilized. Natural 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	• Natural Color
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-T GF30

### Properties<sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.35	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>				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	1.36E+6	943000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	26100	17400	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.9	6.0	%	ISO 527-2/1A/5
Flexural Modulus <sup>3</sup>	1.19E+6	798000	psi	ISO 178
Flexural Stress <sup>3</sup>	39200	23900	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	5.2	--	ft·lb/in <sup>2</sup>	
73°F	6.7	8.6	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	36	--	ft·lb/in <sup>2</sup>	
73°F	47	52	ft·lb/in <sup>2</sup>	

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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 <sup>4</sup>	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 <sup>5</sup>	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity <sup>5</sup>	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

- <sup>1</sup> Typical properties: these are not to be construed as specifications.
- <sup>2</sup> 300°C Melt Temperature/ 90°C Mold Temperature/ 60 MPa Cavity Pressure
- <sup>3</sup> 0.079 in/min
- <sup>4</sup> 10°C/min
- <sup>5</sup> 500V