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			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Aging Resistant • Heat Stabilized	• High Stiffness • Lubricated	
Uses	• Automotive Applications	• Automotive Under the Hood	
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• GM GMW3038P-PA66-GF30H	• IMDS ID 88312539 Color: 333 Black	
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66-T GF30		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm³	ISO 1183
Molding Shrinkage [2]				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.30	--	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.0	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	1.7	--	%	ISO 62
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/in²	
73°F	5.2	7.1	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	31	--	ft·lb/in²	
73°F	36	48	ft·lb/in²	
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