Radilon® A RV450W 333 BK

Radici Group High Performance Polymers - *Polyamide 66*

General Information

Product Description			
PA66 43% glass fiber reinforced injection moulding grade,heat stabilized. Black colour Suitable for parts requiring high stiffness and good mechanical resistance and good heat ageing properties retention			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 43% 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		
Automotive Specifications	• GM GMW3038P-PA66-GF45H	• GM GMW3038P-PA66-GF45J	
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66-T GF43		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.50	g/cm³	ISO 1183
Molding Shrinkage [2]			ISO 294-4
Across Flow	0.80	%	
Flow	0.30	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	5.5	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	1.3	%	ISO 62
Viscosity Index - Sulfuric Acid	3880	in³/lb	ISO 307
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2.06E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	34200	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.9	%	ISO 527-2/1A/5
Flexural Modulus [3]	1.99E+6	psi	ISO 178
Flexural Stress [3]	51200	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.7	ft·lb/in²	
73°F	8.1	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	40	ft·lb/in²	
73°F	41	ft·lb/in²	
Notched Izod Impact Strength (73°F)	7.3	ft·lb/in²	ISO 180/1A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	491	°F	ISO 75-2/Bf
Deflection Temperature Under Load (264 psi, Unannealed)	482	°F	ISO 75-2/Af
Vicat Softening Temperature	482	°F	ISO 306/B50

Melting Temperature [4]	500 °F	ISO 11357-3

Processing Information

Injection	Nominal Value	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