HK:+852-69575415 China GuangDong:+13538586433 ShangHai:+18816996168

Radilon® S URV500W 333 BK

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 50% glass fibre reinforced injection moulding grade. Heat stabilized, very high flowability. Black colour.

Suitable for parts requiring very high stiffness and high mechanical resistance, as in case of metal replacement applications.

General			
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Stabilized	• High Flow	• High Stiffness
Uses	• Metal Replacement		
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA6-GF50		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.57	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.70	--	%	
Flow	0.20	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	4.8	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.4	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	2.39E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	32600	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	--	%	ISO 527-2/1A/5
Flexural Modulus [2]	2.18E+6	--	psi	ISO 178
Flexural Stress [2]	48600	--	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	7.1	--	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	38	--	ft·lb/in²	
73°F	45	--	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	419	--	°F	
Melting Temperature [3]	428	--	°F	ISO 11357-3

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Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	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	464 to 536	°F
Mold Temperature	176 to 194	°F
Injection Rate	Moderate-Fast	

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 0.079 in/min

[3] 10°C/min