Radilon® S RV500W 100 NT

Radici Group High Performance Polymers - *Polyamide 6*

General Information

Product Description

PA6 50% glass fiber reinforced injection moulding grade. Heat stabilized. Natural colour.

Suitable for parts requiring very high stiffness, high mechanical resistance, as in case of metal replacement applications. Good resistance to thermal ageing.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Aging Resistant	• Heat Stabilized	• High Stiffness
Uses	• Automotive Applications	• Metal Replacement	
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• GM GMW3029P-PA6-GF50H		
Appearance	• Natural Color		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA6-T GF50		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.57	--	g/cm³	ISO 1183
Water Absorption (Saturation, 73°F, 0.0787 in)	4.8	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	1.4	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	2.32E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	33600	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.3	--	%	ISO 527-2/1A/5
Flexural Modulus [2]	2.26E+6	--	psi	ISO 178
Flexural Stress [2]	50200	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	8.1	--	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	43	--	ft·lb/in²	ISO 179/1eU
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Melting Temperature [3]	428	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity [4]	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity [4]	1.0E+15	1.0E+13	ohms·cm	IEC 62631-3-1
Comparative Tracking Index (Solution A)	600	--	V	IEC 60112
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

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

[4] 500V