

Radilon® S RV400W 1700 NT

 Radici Group High Performance Polymers - *Polyamide 6*
General Information
Product Description

PA6 40% glass fiber reinforced injection moulding grade. Heat stabilized. Natural colour.

Suitable for parts requiring high stiffness, good mechanical resistance and excellent heat ageing properties retention.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 40% 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 GMW3029P-PA6-GF40H
Appearance	• Natural Color
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-T GF40

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.45	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.80	--	%	
Flow	0.30	--	%	
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	1.4	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.77E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	30500	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.2	--	%	ISO 527-2/1A/5
Flexural Modulus ²	1.52E+6	--	psi	ISO 178
Flexural Stress ²	42100	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	8.6	--	ft·lb/in ²	ISO 179/1eA
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	401	--	°F	ISO 75-2/Af
Vicat Softening Temperature	410	--	°F	ISO 306/B50
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
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	0.10 %
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

