

Radilon® S RCP4015LK 100 NT

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 40% glass fibre and mineral filler reinforced injection moulding grade. Heat stabilized. Natural colour.

Suitable for parts requiring improved stiffness and dimensional stability, reduced shrinkage and low warpage.

General

Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight
Additive	• Heat Stabilizer
Features	• Good Dimensional Stability • Heat Stabilized • Good Stiffness • Low Shrinkage • Low Warpage
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-(GF+MX)40

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.47	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.50	--	%	
Flow	0.30	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	6.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.6	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.65E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	20300	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.6	--	%	ISO 527-2/1A/5
Flexural Modulus ²	1.60E+6	--	psi	ISO 178
Flexural Stress ²	31200	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	26	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	419	--	°F	
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	401	--	°F	
Vicat Softening Temperature	410	--	°F	ISO 306/B50
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 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	482 to 554 °F
Mold Temperature	158 to 176 °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