Radilon® S RCP3010LK 100 NT

Radici Group High Performance Polymers - *Polyamide 6*

General Information

Product Description

PA6 30% glass fiber 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			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber\Mineral, 30% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Good Dimensional Stability • Good Stiffness	• Heat Stabilized • Low Shrinkage	• Low Warpage
Uses	• Automotive Applications		
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• STELLANTIS MS-DB-41 CPN4594		
Appearance	• Natural Color		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA6-T (GF+MX)30		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm³	ISO 1183
Molding Shrinkage [2]				ISO 294-4
Across Flow	0.60	--	%	
Flow	0.40	--	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.5	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	2.0	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.20E+6	609000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	15200	8700	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.1	10	%	ISO 527-2/1A/5
Flexural Modulus [3]	1.09E+6	--	psi	ISO 178
Flexural Stress [3]	23200	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	2.4	--	ft·lb/in²	
73°F	2.9	4.0	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	21	--	ft·lb/in²	
73°F	24	25	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	410	--	°F	ISO 75-2/Bf
Deflection Temperature Under Load (264 psi, Unannealed)	392	--	°F	ISO 75-2/Af
Vicat Softening Temperature	410	--	°F	ISO 306/B50
Melting Temperature [4]	428	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**

Surface Resistivity [5]	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity [5]	1.0E+15	1.0E+13	ohms·cm	IEC 62631-3-1
Comparative Tracking Index (Solution A)	550	--	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
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	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] 280°C Melt Temperature/ 80°C Mold Temperature/ 60 MPa Cavity Pressure

[3] 0.079 in/min

[4] 10°C/min

[5] 500V