Radilon® A RV300K 1700 NT

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 30% glass fibre reinforced, injection moulding grade. Heat stabilized. Natural colour.

Suitable for parts requiring medium stiffness, good mechanical and impact properties with good heat resistance.

General			
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Good Heat Resistance	• Heat Stabilized	• Medium Stiffness
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66-GF30		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.36	g/cm³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	1.0	%	
Flow	0.30	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.0	%	ISO 62
Water Absorption			ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.7	%	
Viscosity Number (H2SO4 (Sulphuric Acid))	140	cm³/g	ISO 307
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.44E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	27700	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.2	%	ISO 527-2/1A/5
Flexural Modulus [2]	1.38E+6	psi	ISO 178
Flexural Stress [2]	42100	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.8	ft·lb/in²	
73°F	6.3	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	36	ft·lb/in²	
73°F	45	ft·lb/in²	
Notched Izod Impact Strength (73°F)	5.0	ft·lb/in²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	38	ft·lb/in²	ISO 180/1U
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	482	°F	ISO 75-2/Bf
Deflection Temperature Under Load			ISO 75-2/Af
264 psi, Unannealed	455	°F	

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Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	473	°F	ISO 306/B50
Melting Temperature [3]	500	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	1.4E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	5.3E-5	in/in/°F	ISO 11359-2
Flammability	**Nominal Value**	**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	Nominal Value	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	536 to 572	°F
Mold Temperature	176 to 212	°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