Radilon® A HSK 164 NT

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 injection moulding grade. Internally lubricated, fast cycles, easy mould release. Heat stabilized. Natural colour.

Suitable for high productivity applications like fasteners, connectors, cable ties.

General			
Additive	• Heat Stabilizer		
Features	• Fast Molding Cycle • Good Mold Release	• Heat Stabilized • Lubricated	
Uses	• Automotive Applications	• Connectors	• Fasteners
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.3	--	%	
Flow	1.2	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	8.9	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	2.1	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	421000	174000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	11600	7980	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.5	30	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	30	> 50	%	ISO 527-2/1A/50
Flexural Modulus [2]	421000	--	psi	ISO 178
Flexural Stress [2]	16700	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	2.1	--	ft·lb/in²	
73°F	2.5	5.7	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	No Break	--		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	392	--	°F	

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	158	--	°F	
Vicat Softening Temperature	464	--	°F	ISO 306/B50
Melting Temperature [3]	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	4.7E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	4.7E-5	--	in/in/°F	ISO 11359-2
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+13	1.0E+11	ohms·cm	IEC 62631-3-1
Comparative Tracking Index				IEC 60112
Solution A	600	--	V	
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
Flame Rating				UL 94
0.016 in	V-2	--		
0.031 in	V-2	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.08 in	1470	--	°F	

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	518 to 554	°F
Mold Temperature	158 to 194	°F
Injection Rate	Moderate	

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 0.079 in/min

[3] 10°C/min

[4] 500 V