

Radilon® A HS 164 NT

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 injection moulding grade. Internally lubricated. Fast cycling. Natural colour.

General purpose grade, suitable for parts requiring high productivity like fasteners, connectors, cable ties.

General

Additive	• Lubricant		
Features	• Fast Molding Cycle	• General Purpose	• Lubricated
Uses	• Automotive Applications • Connectors	• Fasteners • Wire & Cable Applications	
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66, MN,S14-030		
Resin ID (ISO 1043)	• PA66		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.5	--	%	
Flow	1.5	--	%	
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	--	%	
Viscosity Number				ISO 307
H2SO4 (Sulphuric Acid)	135	--	cm ³ /g	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	435000	189000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	11600	7250	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.6	30	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	30	> 50	%	ISO 527-2/1A/50
Flexural Modulus ²	406000	174000	psi	ISO 178
Flexural Stress ²	16000	9430	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	2.1	5.2	ft·lb/in ²	
73°F	2.4	7.1	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	No Break	--		

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed	392	--	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	158	--	°F	ISO 75-2/Af
Vicat Softening Temperature	464	--	°F	ISO 306/B50
Melting Temperature ³	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	5.3E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	5.2E-5	--	in/in/°F	ISO 11359-2
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
Comparative Tracking Index Solution A	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
Flame Rating 0.016 in 0.031 in	V-2 V-2	-- --		UL 94
Glow Wire Flammability Index 0.030 in 0.04 in 0.08 in	1760 1650 1650	-- -- --	°F °F °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	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