

Radici Radilon A HS 164 NT

PA66 injection molding grade. Internally lubricated. Fast cycling. Natural color. General purpose. Suitable for parts requiring high productivity like fasteners, connectors, cable ties.
 Information provided by Radici Group.

Physical Properties	Metric	English	Comments
Density	1.14 g/cc	0.0412 lb/in ³	DAM; ISO 1183
Water Absorption	8.9 % @Thickness 2.00 mm, Temperature 23.0 °C	8.9 % @Thickness 0.0787 in, Temperature 73.4 °F	Immersion; ISO 62
Moisture Absorption	2.10 % @Thickness 2.00 mm, Temperature 23.0 °C	2.10 % @Thickness 0.0787 in, Temperature 73.4 °F	50% RH; ISO 62
Viscosity Test	135 cm ³ /g	1.35 dl/g	Viscosity Index; Sulfuric Acid; ISO 307
Linear Mold Shrinkage, Flow	0.012 cm/cm	0.012 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.014 cm/cm	0.014 in/in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	50.0 MPa	7250 psi	50mm/min. Conditioned; ISO 527-2/1A
	80.0 MPa	11600 psi	50mm/min. DAM; ISO 527-2/1A
Elongation at Break	30 %	30 %	50 mm / min. DAM; ISO 527-2/1A
	>= 50 %	>= 50 %	5 mm / min. Conditioned; ISO 527-2/1A
Elongation at Yield	4.6 %	4.6 %	DAM; ISO 527-2/1A
	30 %	30 %	Conditioned; ISO 527-2/1A
Tensile Modulus	1.30 GPa	189 ksi	1mm / min. Conditioned; ISO 527-2/1A
	3.00 GPa	435 ksi	1mm / min. DAM; ISO 527-2/1A
Flexural Strength	110 MPa	16000 psi	2mm / min. DAM; ISO 178
Flexural Modulus	2.80 GPa	406 ksi	2mm / min. DAM; ISO 178
Charpy Impact Unnotched	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	DAM; ISO 179/1eU
Charpy Impact, Notched	0.450 J/cm ² @Temperature -30.0 °C	2.14 ft-lb/in ² @Temperature -22.0 °F	DAM; ISO 179/1e/A

	0.500 J/cm ² @Temperature 23.0 °C	2.38 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 179/1e/A
	1.50 J/cm ² @Temperature 23.0 °C	7.14 ft-lb/in ² @Temperature 73.4 °F	Conditioned; ISO 179/1e/A
Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+11 ohm-cm	1.00e+11 ohm-cm	Conditioned. 500V; IEC 60093
	1.00e+13 ohm-cm	1.00e+13 ohm-cm	DAM; 500V.; IEC 60093
Surface Resistance	1.00e+10 ohm	1.00e+10 ohm	Conditioned. 500V; IEC 60093
	1.00e+12 ohm	1.00e+12 ohm	DAM; 500V.; IEC 60093
Comparative Tracking Index	600 V	600 V	DAM. Sol.A; IEC 60112
Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	95.0 µm/m-°C @Temperature 23.0 - 55.0 °C	52.8 µin/in-°F @Temperature 73.4 - 131 °F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	94.0 µm/m-°C @Temperature 23.0 - 55.0 °C	52.2 µin/in-°F @Temperature 73.4 - 131 °F	ISO 11359-1/-2
Melting Point	260 °C	500 °F	10°C/min; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	200 °C	392 °F	ISO 75/2Bf
Deflection Temperature at 1.8 MPa (264 psi)	70.0 °C	158 °F	ISO 75/2Af
Vicat Softening Point	240 °C @Load 5.10 kg	464 °F @Load 11.2 lb	50°C/h; ISO 306
Flammability, UL94	V-2 @Thickness 0.800 mm	V-2 @Thickness 0.0315 in	
	V-2 @Thickness 0.400 mm	V-2 @Thickness 0.0157 in	
Flame Spread	0.000 mm/min @Thickness 3.00 mm	0.000 in/min @Thickness 0.118 in	Automotive Interior; ISO 3795
Glow Wire Flammability Index	750 °C @Thickness 1.00 mm	1380 °F @Thickness 0.0394 in	IEC 60695-2-1/2
	800 °C @Thickness 2.00 mm	1470 °F @Thickness 0.0787 in	IEC 60695-2-1/2