

Radici RADIFLAM ARV300 AF 830 BR

PA66 flame retardant injection molding grade, halogen and red phosphorus free. 25% glass fiber reinforced. Natural color. Suitable for parts requiring fire retardancy along with medium stiffness and mechanical resistance. Good electrical insulating properties. Rated V-0 according to UL-94.

Physical Properties	Metric	English	Comments
Density	1.43 g/cc	0.0517 lb/in ³	ISO 1183

Water Absorption	5.4 % @Thickness 2.00 mm	5.4 % @Thickness 0.0787 in	Immersion at 23°C; ISO 62
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Moisture Absorption	1.30 % @Thickness 2.00 mm	1.30 % @Thickness 0.0787 in	50% RH; ISO 62
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Linear Mold Shrinkage, Flow	0.0040 cm/cm	0.0040 in/in	Melt Temp/Mold Temp/Cavity Pressure: 280/80/60; ISO 294-4
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Linear Mold Shrinkage, Transverse	0.010 cm/cm	0.010 in/in	Melt Temp/Mold Temp/Cavity Pressure: 280/80/60; ISO 294-4
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Mechanical Properties	Metric	English	Comments
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Tensile Strength at Break	145 MPa	21000 psi	5mm/min; ISO 527-2/1A
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Elongation at Break	2.7 %	2.7 %	5mm/min; ISO 527-2/1A
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Tensile Modulus	9.40 GPa	1360 ksi	1mm/min; ISO 527-2/1A
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Flexural Strength	220 MPa	31900 psi	2mm/min; ISO 178
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Flexural Modulus	8.85 GPa	1280 ksi	2mm/min; ISO 178
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Charpy Impact Unnotched	6.50 J/cm ²	30.9 ft-lb/in ²	ISO 179/1eU
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Electrical Properties	Metric	English	Comments
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Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	500V; IEC 60093
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Surface Resistance	1.00e+12 ohm	1.00e+12 ohm	500V; IEC 60093
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Comparative Tracking Index	600 V	600 V	Sol. A; IEC 60112
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Thermal Properties	Metric	English	Comments
Melting Point	260 °C	500 °F	ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	250 °C	482 °F	ISO 75/2Bf
Deflection Temperature at 1.8 MPa (264 psi)	230 °C	446 °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-0 @Thickness 0.800 mm	V-0 @Thickness 0.0315 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 Ignition Temperature	725 °C @Thickness 1.00 mm	1340 °F @Thickness 0.0394 in	IEC 60695-2-13
	775 °C @Thickness 2.00 mm	1430 °F @Thickness 0.0787 in	IEC 60695-2-13
Glow Wire Flammability Index	960 °C @Thickness 1.00 mm	1760 °F @Thickness 0.0394 in	IEC 60695-2-12
	960 °C @Thickness 2.00 mm	1760 °F @Thickness 0.0787 in	IEC 60695-2-12
Processing Properties	Metric	English	Comments
Melt Temperature	280 - 300 °C	536 - 572 °F	
Mold Temperature	80.0 - 100 °C	176 - 212 °F	