

Radiflam® B RV300K AE 375 BK

Radici Group High Performance Polymers - Polybutylene Terephthalate

General Information

Product Description

PBT flame retardant injection moulding grade. 30% glass fiber reinforced. Black colour.

Suitable for parts requiring fire retardancy along with high stiffness and good mechanical resistance. Rated V-0 according to UL-94.

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant • High Stiffness
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PBT-GF30 FR(17)

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.67	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	3.8	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	0.90	%	
Flow	0.40	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.55E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	19600	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.4	%	ISO 527-2/1A/5
Flexural Modulus ²	1.46E+6	psi	ISO 178
Flexural Stress ²	31200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.3	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	29	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	401	°F	ISO 75-2/Af
Vicat Softening Temperature	410	°F	ISO 306/B50
Melting Temperature ³	437	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	ohms·m	IEC 62631-3-1
Comparative Tracking Index (Solution A)	250	V	IEC 60112

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Flammability	Nominal Value	Unit	Test Method
Burning Rate (0.118 in)	0.0	in/min	ISO 3795
Flame Rating			UL 94
0.016 in		V-0	
0.031 in		V-0	
Glow Wire Flammability Index			IEC 60695-2-12
0.04 in	1760	°F	
0.08 in	1760	°F	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer	248	°F
Drying Time - Desiccant Dryer	2.0 to 4.0	hr
Dew Point - Desiccant Dryer	< -40	°F
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	482 to 536	°F
Mold Temperature	176 to 194	°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