

Radiflam® A FR 308 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 flame retardant injection moulding grade. Halogen and phosphorus free. Black colour.

Suitable for parts where fire retardancy is required. Rated V-0 at 0.4 mm according to UL-94. Also suitable for monofilament extrusion.

General

Additive	• Flame Retardant		
Features	• Flame Retardant	• Halogen Free	• Low (to None) Phosphorus Content
Uses	• Monofilaments		
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Extrusion	• Injection Molding	
Resin ID (ISO 1043)	• PA66 FR(30)		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.17	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.1	--	%	
Flow	1.1	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	7.7	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.8	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	493000	370000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	10900	7250	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.2	4.0	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	13	> 50	%	ISO 527-2/1A/50
Flexural Modulus ²	479000	--	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	1.7	--	ft·lb/in ²	
73°F	1.9	2.9	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	26	--	ft·lb/in ²	
73°F	38	--	ft·lb/in ²	
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 264 psi, Unannealed	158	--	°F	ISO 75-2/Af
Vicat Softening Temperature	428	--	°F	ISO 306/B50
Melting Temperature ³	500	--	°F	ISO 11357-3
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				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	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.04 in	> 1430	--	°F	
0.08 in	> 1380	--	°F	
Oxygen Index	35	--	%	ISO 4589-2

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	0.10 %
Processing (Melt) Temp	518 to 554 °F
Mold Temperature	140 to 176 °F
Injection Rate	Moderate
Extrusion	Dry Unit
Melt Temperature	518 to 554 °F

Notes

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

² 0.079 in/min

³ 10°C/min