

Radiflam® A FRX 328 BK

Radici Group High Performance Polymers - *Polyamide 66*

General Information

Product Description

PA66 flame retardant injection moulding grade with enhanced mechanical properties after thermal aging. Enhanced flowability. Halogen and phosphorus free. Black colour.

Suitable for parts where fire retardancy is required. Rated V-0 at 0.25 mm according to UL-94.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant		
Features	• Flame Retardant • Good Flow	• Halogen Free • Low (to None) Phosphorus Content	
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66 FR(30)		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.18	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.1	--	%	
Flow	1.1	--	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.5	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	1.7	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	522000	355000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	10200	7250	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.2	2.2	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	2.7	10	%	ISO 527-2/1A/50
Flexural Modulus ²	508000	348000	psi	ISO 178
Flexural Stress ²	17400	12300	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.4	2.4	ft·lb/in ²	ISO 179/1eA
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	428	--	°F	ISO 306/B50
Ball Pressure Test (> 392°F)	Pass	--		IEC 60695-10-2
Melting Temperature ³	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	4.4E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	5.0E-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				UL 94
0.0079 in	V-0	--		
0.016 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 (0.04 in)	1430	--	°F	IEC 60695-2-13

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	

Notes

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

² 0.079 in/min

³ 10°C/min

