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		
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/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.1	--	%	
Flow	1.1	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	7.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.7	--	%	
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				ISO 179/1eA
73°F	1.4	2.4	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	392	--	°F	
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	158	--	°F	
Vicat Softening Temperature	428	--	°F	ISO 306/B50
Ball Pressure Test (> 392°F)	Pass	--		IEC 60695-10-2

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Thermal	Dry	Conditioned	Unit	Test Method
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				IEC 60112
Solution A	600	--	V	
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				IEC 60695-2-13
0.04 in	1430	--	°F	

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