Radiflam® A FR 122 NT

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 flame retardant injection moulding grade. Halogen and phosphorus free. High flowability. Natural colour.

Suitable for parts where fire retardancy is required, particularly for thin-walled items of with long flow paths. Rated V-0 at 0.4 mm according to UL-94.

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

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.18	--	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)				ISO 1133
290°C/2.16 kg	140	--	g/10 min	
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	537000	--	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	13100	--	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.0	--	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	6.0	--	%	ISO 527-2/1A/50
Flexural Modulus [2]	493000	--	psi	ISO 178
Flexural Stress [2]	17400	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
73°F	1.7	--	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	176	--	°F	

Radiflam® A FR 122 NT

Radici Group High Performance Polymers - Polyamide 66

Thermal	Dry	Conditioned	Unit	Test Method
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
Electric Strength	790	660	V/mil	IEC 60243-1
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
0.016 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	

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