Radilon® A CP400 333 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 40% mineral filled injection moulding grade. Black colour.

Suitable for parts requiring good dimensional stability, reduced shrinkage and low warpage.

General			
Filler / Reinforcement	• Mineral, 40% Filler by Weight		
Features	• Good Dimensional Stability	• Low Shrinkage	• Low Warpage
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66-MX40		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.45	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.1	--	%	
Flow	1.0	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	5.7	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.8	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	870000	450000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	12600	6530	psi	ISO 527-2/1A/5
Tensile Strain (Break)	8.0	15	%	ISO 527-2/1A/5
Flexural Modulus [2]	885000	--	psi	ISO 178
Flexural Stress [2]	21800	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	2.1	--	ft·lb/in²	
73°F	2.4	2.9	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	26	--	ft·lb/in²	
73°F	33	38	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	212	--	°F	
Vicat Softening Temperature	473	--	°F	ISO 306/B50
Melting Temperature [3]	500	--	°F	ISO 11357-3

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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	500	--	V	
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
Flame Rating (0.031 in)	HB	--		UL 94
Glow Wire Flammability Index				IEC 60695-2-12
0.08 in	1290	--	°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	0.15	%
Processing (Melt) Temp	536 to 572	°F
Mold Temperature	176 to 212	°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