Radilon® A ERV250K 3133 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 25% glass fiber reinforced extrusion grade. Toughened and heat stabilized. Black colour.

Material especially developed for extrusion of thermal-breaker profiles for doors and windows. Also suitable for injection moulding.

General			
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Heat Stabilizer	• Impact Modifier	
Features	• Good Toughness	• Heat Stabilized	• Impact Modified
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Extrusion	• Injection Molding	
Resin ID (ISO 1043)	• PA66-GF25		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.31	--	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)				ISO 1133
275°C/5.0 kg	17	--	g/10 min	
Molding Shrinkage				ISO 294-4
Across Flow	0.70	--	%	
Flow	0.50	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	7.4	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.7	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.15E+6	769000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	21800	13100	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	5.5	%	ISO 527-2/1A/5
Flexural Modulus [2]	1.03E+6	--	psi	ISO 178
Flexural Stress [2]	31200	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	35	38	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	464	--	°F	
Melting Temperature [3]	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	1.7E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	3.6E-5	--	in/in/°F	ISO 11359-2
Thermal Conductivity [4] (73°F)	2.1	--	Btu·in/hr/ft²/°F	

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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
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Burning Rate (0.118 in)	< 0.39	--	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	
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

[4] inplane