Radilon® NeXTreme RV350X2N 333 BK

Radici Group High Performance Polymers - Polyamide

General Information

Product Description

High Temperature polyamide injection molding grade, 35% glass fiber reinforced. Halogen free and superior thermal resistance in contact with hot air. Electrically neutral heat stabilization. Black colour.

Suitable for demanding mechanical applications in very severe temperature conditions, where the parts must endure long term contact with hot air until 220-230°C. Very good improvement of mechanical properties retention after ageing. Typical applications in automotive are under bonnet components, like turbo air ducts, intercooler end caps. This material can be processed with water conditioned tools.

General			
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Halogen Free	• Heat Aging Resistant	• Heat Stabilized
Uses	• Automotive Applications	• Automotive Under the Hood	
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA*-GF35		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.46	g/cm³	ISO 1183
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.77E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	29000	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	%	ISO 527-2/1A/5
Flexural Modulus [2]	1.64E+6	psi	ISO 178
Flexural Stress [2]	42100	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	5.7	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	31	ft·lb/in²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Melting Temperature [3]	563	°F	ISO 11357-3
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity (500 V)	1.0E+12	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	ohms·m	IEC 62631-3-1
Flammability	**Nominal Value**	**Unit**	**Test Method**
Burning Rate (0.118 in)	0.0	in/min	ISO 3795
Flame Rating (0.031 in)	HB		UL 94

Radilon® NeXTreme RV350X2N 333 BK

Radici Group High Performance Polymers - Polyamide

Processing Information		
Injection	**Nominal Value**	**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	581 to 599	°F
Mold Temperature	194 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