Radilon® AESTUS T1 RV330RG 3900 BK

Radici Group High Performance Polymers - Polyphthalamide

General Information

Product Description

PPA injection moulding grade 33% glass fiber reinforced with high glass transition temperature and high melting point. Black colour.

Suitable for parts requiring high stiffness and strength. High resistance to hot water and automotive cooling circuit liquids.

General		
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight	
Features	• High Stiffness	• High Strength
Uses	• Automotive Applications	
Agency Ratings	• EU 2011/65/EC	
RoHS Compliance	• RoHS Compliant	
Appearance	• Black	
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA6T/6I-GF33	

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.43	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.70	--	%	
Flow	0.30	--	%	
Water Absorption				ISO 62
24 hr, 73°F, 0.0787 in	0.20	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.71E+6	1.71E+6	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	31900	28300	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.6	2.5	%	ISO 527-2/1A/5
Flexural Modulus [2]	1.62E+6	--	psi	ISO 178
Flexural Stress [2]	43500	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	5.7	--	ft·lb/in²	
73°F	6.2	5.7	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	31	--	ft·lb/in²	
73°F	38	--	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	527	--	°F	
Melting Temperature [3]	590	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	1.1E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	3.8E-5	--	in/in/°F	ISO 11359-2

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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)	0.0	--	in/min	ISO 3795
Flame Rating (0.031 in)	HB	--		UL 94

Processing Information

Injection	Dry	Unit
Drying Temperature - Desiccant Dryer	248	°F
Drying Time - Desiccant Dryer	> 4.0	hr
Dew Point - Desiccant Dryer	< -4	°F
Suggested Max Moisture	0.10	%
Processing (Melt) Temp	608 to 644	°F
Mold Temperature	266 to 302	°F
Injection Rate	Fast	

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 0.079 in/min

[3] 10°C/min