

Radilon® D ERV300W 333 BK

Radici Group High Performance Polymers - Polyamide 610

General Information

Product Description

PA610 30% glass fiber reinforced injection moulding grade. Toughened, heat stabilized. Black colour.

Suitable for parts requiring good dimensional stability, high stiffness and mechanical resistance. Typical application: automotive fuel system components. This grade is partially renewably-sourced (64% of base polymer by weight).

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer	• Impact Modifier	
Features	• Good Dimensional Stability • Heat Stabilized	• High Stiffness • Impact Modified	• Renewable Resource Content
Uses	• Automotive Applications		
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA610-I-GF30		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.26	--	g/cm ³	ISO 1183
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	2.2	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.0	--	%	
Biobased Carbon Content	64	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.02E+6	740000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	16000	13100	psi	ISO 527-2/1A/5
Tensile Strain (Break)	5.0	8.0	%	ISO 527-2/1A/5
Flexural Modulus ²	899000	653000	psi	ISO 178
Flexural Stress ²	26100	20300	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	9.5	--	ft·lb/in ²	
73°F	14	19	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	40	--	ft·lb/in ²	
73°F	48	50	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	383	--	°F	
Melting Temperature ³	428	--	°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
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.031 in)	HB	--		UL 94

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	464 to 536	°F
Mold Temperature	176 to 194	°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