

Radilon® D HSKC 106 NT

Radici Group High Performance Polymers - Polyamide 610

General Information

Product Description

PA610 injection moulding grade. Nucleated and lubricated, fast cycling. Heat stabilized. Natural colour.

This grade is partially renewably-sourced (64% of base polymer by weight).

General

Additive	<ul style="list-style-type: none"> Lubricant Nucleating Agent
Features	<ul style="list-style-type: none"> Fast Molding Cycle Lubricated Heat Stabilized Nucleated Renewable Resource Content
Agency Ratings	<ul style="list-style-type: none"> EU 2011/65/EC
RoHS Compliance	<ul style="list-style-type: none"> RoHS Compliant
Appearance	<ul style="list-style-type: none"> Natural Color
Processing Method	<ul style="list-style-type: none"> Injection Molding
Resin ID (ISO 1043)	<ul style="list-style-type: none"> PA610

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.08	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.2	--	%	
Flow	1.0	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	3.2	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.4	--	%	
Viscosity Number				ISO 307
H2SO4 (Sulphuric Acid)	142	--	cm ³ /g	
Biobased Carbon Content	64	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	377000	--	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	10200	--	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	7.0	--	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	40	--	%	ISO 527-2/1A/50
Flexural Modulus ²	334000	--	psi	ISO 178
Flexural Stress ²	13100	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
73°F	2.1	--	ft-lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	No Break	--		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	131	--	°F	

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Thermal	Dry	Conditioned	Unit	Test Method
Vicat Softening Temperature	365	--	°F	ISO 306/B50
Melting Temperature ³	428	--	°F	ISO 11357-3
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 (0.06 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	446 to 500	°F
Mold Temperature	158 to 176	°F
Injection Rate	Moderate	

Notes

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

² 0.079 in/min

³ 10°C/min