

Radilon® S BF 990 GY

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 injection moulding grade. Low friction. Natural grey colour.

Suitable for parts and components requiring low friction and improved wear resistance, such as gears, bearings, and cams.

General

Features	• Low Friction	• Wear Resistant
Uses	• Bearings	• Cams
Agency Ratings	• EU 2011/65/EC	• Gears
RoHS Compliance	• RoHS Compliant	
Appearance	• Grey	
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA6	

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.90	--	%	
Flow	0.90	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	450000	--	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	10900	--	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.2	--	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	20	--	%	ISO 527-2/1A/50
Flexural Modulus ²	435000	--	psi	ISO 178
Flexural Stress ²	16000	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	1.9	--	ft·lb/in ²	
73°F	2.4	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	158	--	°F	
Vicat Softening Temperature	392	--	°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
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
Flame Rating (0.031 in)	HB	--		UL 94

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Flammability	Dry	Conditioned	Unit	Test Method
Glow Wire Flammability Index 0.08 in	1200	--	°F	IEC 60695-2-12

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	482 to 536	°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