

RADILON S BF 990 GY

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.

ISO 1043: PA6

REGIONAL AVAILABILITY: North America, Europe, Asia Pacific, South and Central America, Near East/Africa

MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.15%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

Injection Molding Processing Parameters

Melt Temperature
250 - 280°C

Mold Temperature
70 - 80°C

Injection Speed
medium

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density			1140	
Moulding shrinkage - Parallel / Normal	270/70/60 ^[1]	ISO 1183 ISO 294-4	kg/m ³ %	0.9 / 0.9
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	3100
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	75
Yield Strain	50mm/min	ISO 527-2/1A	%	4.2
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	20
Flexural Modulus	2mm/min	ISO 178	MPa	3000
Flexural Strength	2mm/min	ISO 178	MPa	110
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	5
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m ²	4
THERMAL PROPERTIES				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	220
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	70
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	200
FLAMMABILITY PROPERTIES				
Flammability	0.8mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-12	°C	650
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12

*: DAM = Dry As Moulded state according to ISO 16396-2, **: Cond = Conditioned state similar to ISO 1110

1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

