

# RADILON A CF400W 333 BK

## DESCRIPTION

PA66 40% carbon fibre reinforced injection moulding grade. Heat stabilized. Black colour.

Suitable for parts and components requiring very high mechanical properties: stiffness, dimensional stability, fatigue and creep resistance. The presence of carbon fibres also provides higher electrical and thermal conductivity.

ISO 1043: PA66-CF40

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 0.10%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more. Avoid excessive shear rates and high thermal stresses for better processing. 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  
280 - 300°C

Mold Temperature  
80 - 100°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**
<b>PHYSICAL PROPERTIES</b>				
Density	ISO 1183	kg/m <sup>3</sup>	1320	
Water Absorption, immersion at 23°C	ISO 62	%		5.7
Moisture Absorption 23°C - 50%RH	ISO 62	%		1.6
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	ISO 527-2/1A	MPa	32000	22000
Stress at Break	ISO 527-2/1A	MPa	250	160
Strain at Break	ISO 527-2/1A	%	1.3	1.5
Flexural Modulus	ISO 178	MPa	25000	
Flexural Strength	ISO 178	MPa	390	
Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	65	85
Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	65	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	11	13
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	9	
<b>THERMAL PROPERTIES</b>				
Melting Temperature	ISO 11357-1/-3	°C		260
Heat Deflection Temperature	ISO 75/2Bf	°C		250
Vicat Softening Temperature	ISO 306	°C		240
<b>FLAMMABILITY PROPERTIES</b>				
Flammability	UL 94	class		HB
Glow Wire Flammability Index	IEC 60695-2-12	°C		700
Automotive Interior Flammability	ISO 3795	mm/min		<10
<b>ELECTRICAL PROPERTIES</b>				
Volume Resistivity	IEC 62631-3-1	Ohm*m	100	100

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

