

RADILON A CF300K 333 NER

Material code Colour code

DESCRIPTION

PA66 30% carbon fiber 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 fibers also provides higher electrical and thermal conductivity.

ISO 1043 : PA66-T CF30

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.

Processing Parameters

Melt Temperature:	Mold Temperature:	Injection Speed:
280 ÷ 300 °C	80 ÷ 100 °C	Medium

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet

RoHS compliant 2002/95/CE and following amendments

Technical data sheet

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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
Physical Properties				
Density	ISO 1183	Kg/m ³	1270	
Moisture absorption 23°C – 50%RH	2mm thk ISO 62	%	1.7	
Water absorption, immersion at 23°C	2mm thk ISO 62	%	6	
Mechanical Properties				
Tensile Modulus	1mm/min ISO 527-2/1A	MPa	23000	14500
Stress at Break	5mm/min ISO 527-2/1A	MPa	255	160
Strain at Break	5mm/min ISO 527-2/1A	%	2.1	2.5
Flexural Modulus	2mm/min ISO 178	MPa	19900	
Flexural Strength	2mm/min ISO 178	MPa	370	
Charpy Impact Strength	+23°C ISO 179/1 eU	KJ/m ²	70	85
Charpy Impact Strength	-30°C ISO 179/1 eU	KJ/m ²	60	
Charpy Notched Impact Strength	+23°C ISO 179/1 eA	KJ/m ²	7	9
Charpy Notched Impact Strength	-30°C ISO 179/1 eA	KJ/m ²	5	
Thermal Properties				
Melting Temperature	10°C/min ISO 11357-1-3	°C	260	
Heat Deflection Temperature	1.8 MPa ISO 75/2 A f	°C	235	
Heat Deflection Temperature	0.45 MPa ISO 75/2 B f	°C	250	
Vicat Softening Temperature	50°C/h ISO 306/B50 50N	°C	240	
Flammability Properties				
Flammability	0.8mm UL 94	class	HB	
Glow Wire Flammability Index	2mm IEC 60695-2-1/2	°C/mm	700	
Automotive interior flammability	Burn rate FMVSS302	mm/min	<10	
Electrical Properties				
Volume resistivity	500V IEC 60093	ohm · m	1 E+2	1 E+2
Surface resistivity	500V IEC 60093	ohm	1 E+3	1 E+3
Comparative Tracking Index	Sol.A IEC 60112	V	150	

*DAM = Dry As Moulded state **Cond = Conditioned state similar to ISO 1110 ***Melt Temp [°C] / Mold Temp [°C] / Cavity press [MPa]

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