

RADILON ADLINE CS CF10 HP BK

PROVISIONAL

DESCRIPTION

PA6/66 copolymer 10% carbon fibre reinforced for 3D Printing Fused Deposition Modelling.

Suitable for parts requiring stiffness, high dimensional stability and very reduced shrinkage. The material offers good surface aspect and easy processability.

ISO 1043: PA6/66-CF10

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

THE CHARACTERISTICS SHOWN HERE ARE PROVISIONAL AND REFLECT THE AVERAGE VALUES OF PROPERTIES MEASURED OVER A LIMITED NUMBER OF PRODUCTION CAMPAIGNS

MATERIAL HANDLING AND PROCESSING

The material is available in granules or in filament – 1.75 mm and 2.85 mm diameter.

In the case of granules, 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. In the case of filaments, the material is originally sealed in vacuum bags with silica gel inside to keep environment in dry conditions. For best printing results, it is recommended to pre-dry the filament at 70-80°C for 2-4 h or more. Alternatively, Radilon® Adline filaments are compatible with Drywise system from Thought3D Ltd.

Recommended 3D-Print processing parameters:

Nozzle Temperature	Bed Temperature	Adhesion promoter	Print Speed
250°-280°C	70-100°C	Magigoo glue	30-40 mm/s

*Please note: Parameters are dependent on printer used.
Radici tests were performed on a Ultimaker S5 printer*

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	ISO 1183	kg/m ³	1160	
Water Absorption, immersion at 23°C	ISO 62	%		9
Moisture Absorption 23°C - 50%RH	ISO 62	%		2.6
MECHANICAL PROPERTIES				
Tensile Modulus	ISO 527-2/1A	MPa	3850	[1]
Stress at Yield	ISO 527-2/1A	MPa	65	
Yield Strain	ISO 527-2/1A	%	3.5	
Nominal Strain at Break	ISO 527-2/1A	%	18	
Flexural Modulus	ISO 178	MPa	3500	[2]
Flexural Strength	ISO 178	MPa	60	
Charpy Impact Strength	ISO 179/1eU	kJ/m ²	60	[3]
THERMAL PROPERTIES				
Melting Temperature	ISO 11357-1/-3	°C	195	

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

1: Tensile properties measured on 3D printed XY / flat specimen with a filling print path at +/- 45°

2: Flexural properties measured on 3D printed XY / flat specimen with a filling print path at +/- 45°

3: Impact properties measured on 3D printed XY / flat specimen with a filling print path at +/- 45°

