

# Radilon® ADLINE CS CF10 HP BK

## Radici Group High Performance Polymers - Polyamide 66/6 Copolymer

### General Information

#### Product Description

PA6/66 copolymer 10% carbon fibre reinforced for 3D printing Fused deposition Modeling.

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

#### General

Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight		
Features	• Copolymer • Good Processability	• Good Stiffness • Good Surface Finish	• High Dimensional Stability • Low Shrinkage
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• 3D Printing, Fused Deposition Modeling (FDM)		
Resin ID (ISO 1043)	• PA6/66-CF-10		

### Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.16	g/cm <sup>3</sup>	ISO 1183
Water Absorption (Saturation, 73°F, 0.0787 in)	9.0	%	ISO 62
Water Absorption Equilibrium, 73°F, 0.0787 in, 50% RH	2.6	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	558000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	943	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	3.5	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	18	%	ISO 527-2/1A/50
Flexural Modulus <sup>2</sup>	508000	psi	ISO 178
Flexural Stress <sup>2</sup>	8700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength (73°F)	29	ft·lb/in <sup>2</sup>	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Melting Temperature <sup>3</sup>	383	°F	ISO 11357-3

#### Additional Information

Nozzle Temperature: 250-280°C

Bed Temperature: 70-100°C

Adhesion promoter: Magigoo glue

Print Speed: 30-40 mm/s

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0.079 in/min

<sup>3</sup> 10°C/min