



PRODUCT INFORMATION

RADILON ADLINE CS

PROVISIONAL

DESCRIPTION

PA6/66 copolymer for 3D Printing Fused Deposition Modelling.

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

ISO 1043: PA6/66

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

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

MATERIAL HANDLING AND PROCESSING

The material is available in granules or in filament, and is delivered in moisture-proof, 6 month shelf-life packaging ready for processing. Availability of 1.75 mm and 2.85 mm diameter 3D printer filaments. It is advisable to print continuously up to a maximum of 3 days, after that period proceed with the proper desiccation procedure for the material. 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.

Recommended 3D-Print processing parameters:

Nozzle Temperature 250°-280°C

Bed Temperature 70-100°C Adhesion promoter Magigoo glue Print Speed 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

lssued: 13/11/2020

IT

www.radicigroup.com/plastics - info.plastics@radicigroup.com

The information provided in this documentation corresponds to knowledge of Radici Group High Performance Polymers on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience become available. The data provided reflects the average values of the properties measured over an adequate number of different production cycles and relates only to the designated material; this data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits nor used alone as the basis of design; it is not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since Radici Group High Performance Polymers makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any pattent rights.





TECHNICAL DATA SHEET

RADILON ADLINE CS

PROPERTY		STANDARD	UNIT	VALUE DAM*	Cond**
PHYSICAL PROPERTIES					
Density Water Absorption, immersion at 23°C Moisture Absorption 23°C - 50%RH	2mm 2mm	ISO 1183 ISO 62 ISO 62	kg/m³ % %	1100 ^[1] 10,2 3	
MECHANICAL PROPERTIES					
Tensile Modulus Stress at Yield Yield Strain Nominal Strain at Break Stress at Break Flexural Modulus Flexural Strength Charpy Impact Strength Charpy Notched Impact Strength	1mm/min 50mm/min 50mm/min 2mm/min 2mm/min +23°C +23°C	ISO 527-2/1A ISO 527-2/1A ISO 527-2/1A ISO 527-2/1A ISO 527-2/1A ISO 527-2/1A ISO 178 ISO 178 ISO 179/1eU ISO 179/1eA	MPa MPa % MPa MPa KJ/m ² KJ/m ²	2005 ^[2] 55 4,5 15 50 1900 ^[3] 70 N 30 ^[4]	
THERMAL PROPERTIES					
Melting Temperature Heat Deflection Temperature Heat Deflection Temperature	10°C/min 1.80 MPa 0.45 MPa	ISO 11357-1/-3 ISO 75/2Af ISO 75/2Bf	°C °C °C	195 45 50	

*: DAM = Dry As Moulded state according to ISO 16396-2 **: Cond = Conditioned state similar to ISO 1110 1: 2: Tensile properties measured on 3D printed XY / flat specimen with a filling print path at +/- 45° 3: Flexural properties measured on 3D printed XY / flat specimen with a filling print path at +/- 45°

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

Issued: 13/11/2020

IT

Provisional

www.radicigroup.com/plastics - info.plastics@radicigroup.com

The information provided in this documentation corresponds to knowledge of Radici Group High Performance Polymers on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience become available. The data provided reflects the average values of the properties measured over an adequate number of different production cycles and relates only to the designated material; this data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits nor used alone as the basis of design; it is not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since Radici Group High Performance Polymers cannot anticipate all variations in actual end-use conditions Radici Group High Performance Polymers makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights.