

Technical Data Sheet

ADSINT® PP flex

AdSint® PP flex is especially developed for the SLS process as a polyamide alternative.

In contrast to PA, **AdSint® PP flex** is characterized by an excellent plasticity, higher elongation, low moisture absorption and durability. The fields of application vary widely: automotive, electrical and sport industries, health care and orthopedic products. Works perfectly in hinges and clips. It allows post processing like thermoforming or sealing. **AdSint® PP flex** is resistant to acids and bases, has a translucent color and is practically non-staining. Due to its attractive price, it is an interesting material to expand 3D printing applications and volumes. **AdSint® PP flex** has been tested on most common SLS printers. Parameters for printing will be provided. The recycling rate is between 80% - 100%, depending on the application.

General properties

Measurement	Method & Conditions	Metric Value
Average particle size (X50)	ISO 13320	67-77 µm
PSD max (99%)	Air Jet Sieve	90 µm
Powder packed density 23°C	ISO 1068-1975	0,33 ± 0,05g/cm ³
Part Density 23°C	ISO 61	0,89 ± 0,05g/cm ³
Melt flow rate @ 230°C & 2.16kg	ISO 62/1	10g/10 min.

Thermal properties

Measurement	Method & Conditions	Metric Value
Melting point T ^m	ISO 11357-3	139±2°C
Crystallization point T ^c	ISO 11357-3	104±2°C
Heat Deflection Temperature at 1.8 MPa	ISO 75f	56 ±5°C
Heat Deflection Temperature at 0.46 MPa	ISO 75f	71 ±5°C

Mechanical properties

Measurement	Method & Conditions	Metric Value
Tensile modulus	ISO 527-2:93-1B	1400 ± 100 MPa
Tensile strength at yield	ISO 527-2:93-1B	29 ± 1 MPa
Tensile strength at break	ISO 527-2:93-1B	25 ± 1 MPa
Elongation at break	ISO 527-2:93-1B	50 ± 10 %
Flexural modulus	ISO 178 (23°C)	1150 ± 25 MPa
Charpy – Impact strength (Unnotched)	ISO 179 1eU (23°C)	22 ±2 kJ/m ²
Hardness (Shore D – instantaneous)	ISO 868 (20°C)	72 ± 1 Shore D

Handling – storage

Store the product in original packaging away from moisture and heat. Under these conditions, the material will maintain its technical properties for 3 years. Once the material passes the 3 year limit, it will be necessary to perform testing of the specified data to restart the shelf life period.

Delivery Form

The material will be delivered in 2kg bottles or 20kg drums (2x10kg powder bags).

The information presented in this document is provided in goodwill and represents the best of ADVANC3D Materials' knowledge about the product. It is purely informative. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the goods described or the information provided herein.