

Addigy® PPU 86A W6

Powder Bed Fusion

Additive manufacturing aliphatic ether-based thermoplastic polyurethane for powder bed fusion such as Selective Laser Sintering (SLS) and High-Speed Sintering (HSS).

Key Benefits

- · Color stability: no yellowing under UV light
- · Hot air and hydrolytic stability
- · Good elastic rebound

Applications

- Automotive components (interior/exterior)
- Industrial soft tools (jigs/fixtures)
- · Footwear (midsoles)

Technical Data

Property	Specimen	Value	Unit	Test Method
Appearance		natural color	-	
Density	printed	approx. 1020	kg/m³	ISO 1183-1
Bulk density	powder	approx. 420	kg/m³	ISO 1183-1
Hausner ratio	powder	< 1.25	-	ISO 787-11

Thermal Properties	Specimen	Value	Unit	Test Method
Glass transition temperature	powder	-48	°C	ISO 6721-1
Melting range	powder	100 - 150	°C	ISO 6721-1

Mechanical Properties	Specimen	Value	Unit	Test Method
Shore hardness A	printed	85 - 89	-	ISO 48-4
Tensile strength at break	printed XY	5	MPa	DIN 53504-S2 (200 mm/min.)
Tensile strength at break	printed Z	6	MPa	DIN 53504-S2 (200 mm/min.)
Elongation at break	printed XY	155	%	DIN 53504-S2 (200 mm/min.)
Elongation at break	printed Z	124	%	DIN 53504-S2 (200 mm/min.)
Tear resistance	printed XY	67	kN/m	ISO 34-1
Tear resistance	printed Z	22	kN/m	ISO 34-1
Rebound resilience	printed	68	%	DIN 53512

Disclaimer

The information presented are typical values intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Tested parts were built on a Voxeljet VX200 HSS.



Storage

The product should be stored in its original packaging at all times. If bags or containers have been opened, they must then be sealed again to ensure proper further storage. Prolonged exposure of bags or containers containing Addigy® powders to light or light sources containing UV rays should be avoided. UV radiation will lead to degradation especially, but not limited to color changes of the powders. Constant, normal room temperature with minimal fluctuations and low to normal humidity is essential.

Storage Time

Stratasys represents that, for a period of twenty-four months following the day of shipment as stated in the respective transport documents, the product will meet the specifications or values set forth in the Certificate of Analysis, provided that the product is stored in full compliance with the storage conditions set forth in and referenced under section "storage" above and is otherwise handled appropriately. The lapse of the twenty-four months period does not necessarily mean that the product no longer meets specifications or the set values. However, prior to using said product, Stratasys recommends to test such a product if it still meets the specifications or the set values.

Labeling and statutory requirements

This product data sheet is only valid in conjunction with the latest edition of the corresponding Safety Data Sheet. Any updating of safety-relevant information – in accordance with statutory requirements – will only be reflected in the Safety Data Sheet, copies of which will be revised and distributed. Information relating to the current classification and labeling, applications and processing methods and further data relevant to safety can be found in the currently valid Safety Data Sheet.



stratasys.com ISO 9001:2015 Certified Stratasys Headquarters 7665 Commerce Way, Eden Prairie, MN 55344 +1 800 801 6491 (US Toll Free) +1 952 937-3000 (Intl)

+1 952 937-0070 (Fax)

1 Holtzman St., Science Park, PO Box 2496 Rehovot 76124, Israel +972 74 745 4000 +972 74 745 5000 (Fax)

MATERIAL DATA SHEET
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