

Product Information

INFINAM® FL 6300 L

HIGHLY FATIGUE- AND TEAR-RESISTANT ELASTIC PHOTOPOLYMER FOR ADDITIVE MANUFACTURING



INFINAM® FL 6300 L resin is a purple-colored, 1-part system liquid photopolymer optimized for the Hot Lithography™ technology by the company Cubicure. The fully cured material is a durable rubber which exhibits excellent thermomechanical properties (high elongation, elasticity at low temperature, high fatigue resistance and high tear strength).

Statement on reported properties

The mechanical, thermal, and physical values reported in this document derived from printing various parts with Cubicure printer technology platform (Type 5A tensile bars measured at 500 mm/min – 1 mm/min for the tensile modulus). Those values reflect an approximation of the mean value of a range of values and are intended for reference and comparison purposes only.

Mechanical Properties	Value	Unit	Test Standard
Tensile Modulus	42	MPa	ISO 527
Tensile Strength	10	MPa	ISO 527
Elongation at Break	200	%	ISO 527
Tear Strength	42	kN/m	ISO 34
Bayshore Rebound Resilience	33	%	ASTM D2632
Ross Flex Fatigue, Notched (23 °C) (100 cycles/min, 60 ° bending)	> 400,000	cycles	ASTM D1052
Ross Flex Fatigue, Notched (- 10 °C) (100 cycles/min, 60 ° bending)	> 400,000	cycles	ASTM D1052

Thermal Properties	Value	Unit	Test Standard
Glass Transition Temperature (tanδ)	- 31	°C	-

Physical Properties	Value	Unit	Test Standard
Density	1.15	g/cm <sup>3</sup>	ISO 1183
Water uptake (24 hours)	0.7	%	ISO 62
Water uptake (30 days)	1.6	%	ISO 62
Shore A Hardness	85	-	ISO 868

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