



Kimya ABS Kevlar 3D Filament

ABS KEVLAR has been designed for 3D printing by a precise formulation of aramid fibers into ABS materials.

- NO SHRINKAGE
- LOW WARPING
- SMOOTH SURFACE
- LIGHT WEIGHT OBJECTS

ARMOR 2 years warranty.

FILAMENT PROPERTIES

PROPERTIES	TEST METHODS	VALUES
Diameter	INS-6712	1.75 ± 0.1 mm 2.85 ± 0.1 mm
Density	ISO 1183-1	1.037 g/cm ³
Moisture rate	INS-6711	< 1 %
Melt flow index (MFI)	ISO 1133-1 (@220°C - 10 kg)	14.8 g/10min
Glass transition temperature (T_g)	ISO 11357-1 DSC (10°C/min - 20-220°C)	100 °C

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINTING DIRECTION	XY
Printing Speed	50 mm/s
Infill	100% - rectilinear
Infill Angle	45°/-45°
Nozzle Temperature	260°C
Bed T°	100°C

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	VALUES
MECHANICAL PROPERTIES	Tensile modulus	ISO 527-2/5A/50	1,775 MPa
	Tensile Strength	ISO 527-2/5A/50	31.1 MPa
	Tensile strain at strength	ISO 527-2/1A/50	2.3 %
	Tensile Stress at Break	ISO 527-2/5A/50	27.7 MPa
	Tensile strain at break	ISO 527-2/5A/50	4.9 %
	Flexural modulus	ISO 178	1,509 MPa
	Flexural stress at conventional deflection (3,5% strain)*	ISO 178	44.7 MPa
	Shore Hardness	ISO 868	65,2D
Note 1	*According to ISO 178, end of the test at 5% deformation even if there is no specimen break.		
Note 2	The data should be considered as indicative values - Properties can be influenced by production conditions.		

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