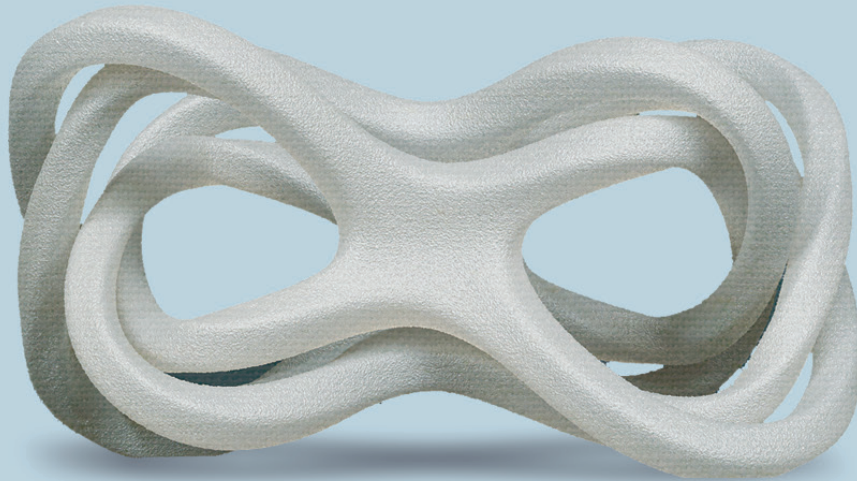




KIMYA **PEBA-S**



PEBA-S filament, PEBA[®]X resin by arkema,
Is efficient.

| **HIGH ELONGATION AT BREAK** | **EASY TO PRINT**
| **FLEXIBLE** | **LIGHTWEIGHT POLYMER**

PEBAX[®]
BY ARKEMA

FILAMENT PROPERTIES

DESCRIPTION	TEST METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Density	ISO 1183-1	g/cm ³	1.013
Moisture rate	INS-6711	%	< 1
Melt Flow Index (MFI) (@220°C – 10 kg)	ISO 1133-1	g/10min	13.6
Melting temperature (Tm)	ISO 11357-1 DSC (10°C/min – 90 to 190°C)	°C	149

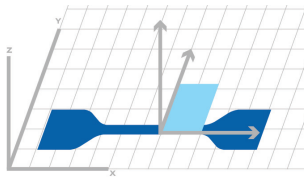
MASTERTEC^{3D}

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINTING DIRECTION	XY
PRINTING SPEED	44 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION TEMPERATURE	240°C
BED TEMPERATURE	85°C

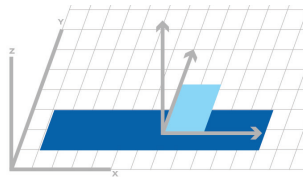
RESULTS

TENSILE TEST



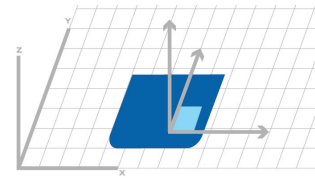
Dim.(mm): 75x12.5x2
Specimen type: ISO 527-5A

BENDING TEST - CHARPY IMPACT



Dim. (mm): 80x10x4

HARDNESS



Dim.(mm): 45x45x4

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
MECHANICAL PROPERTIES	Tensile modulus	ISO 37/2/500	MPa	63
	Tensile strength	ISO 37/2/500	MPa	32,8
	Tensile strain at strength	ISO 37/2/500	%	>550
	Tensile stress at break	ISO 37/2/500	MPa	32,3
	Tensile strain at break	ISO 37/2/500	%	>550
	Flexural modulus	ISO 178	MPa	70
	Flexural stress at conventionnal deflection (3,5% strain)**	ISO 178	MPa	2,4
	Charpy impact resistance	ISO 179-1/1eA	kJ/m ²	No break
	Shore Hardness	ISO 868	Shore A	93

*According to ISO 178, end of the test at 5% deformation even if there is no specimen break

** The data should be considered as indicative values - Properties can be influenced by production conditions.