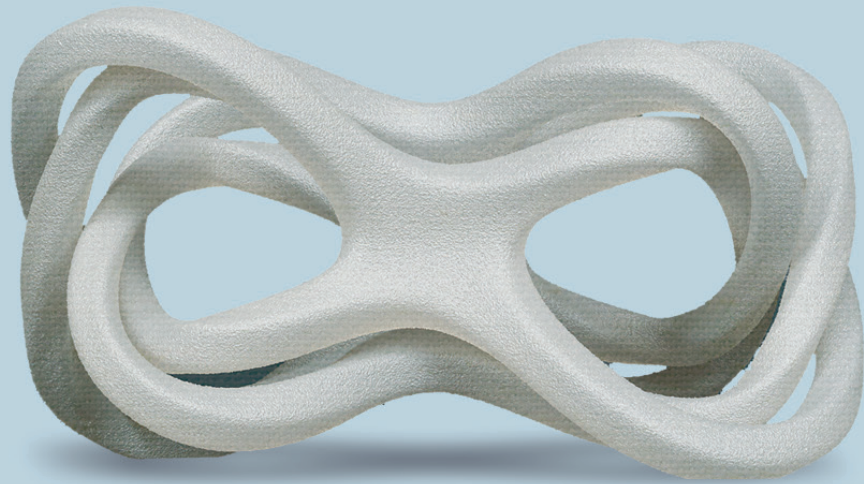




PC-S KIMYA



PC-S FILAMENT RESISTS SHOCK AND HEAT. IT IS IDEAL FOR PRINTING STURDY PARTS.

| FDA CERTIFICATION | STERILIZABLE

| HEAT RESISTANCE (UP TO 140°C)

FILAMENT PROPERTIES

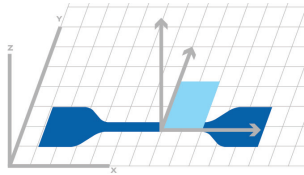
DESCRIPTION	TEST METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1
Density	ISO 1183-1	g/cm ³	1.193
Moisture rate	INS-6711	%	< 4,000
Melt Flow Index (MFI) (@260°C – 5 kg)	ISO 1133-1	g/10min	25.5
Glass transition temperature T _g	ISO 11357-1 DSC (10°C/min – 20 à 220°C)	°C	n/a
Melting temperature T _m	ISO 11357-1 DSC (10°C/min – 20 à 220°C)	°C	n/a

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINTING DIRECTION	XY
PRINTING SPEED	45 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION TEMPERATURE	295°C
BED TEMPERATURE	105°C

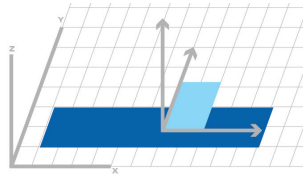
RESULTS

TENSILE TEST



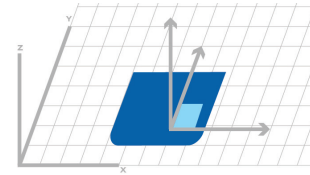
Dim.(mm): 75x12.5x2
Specimen type: ISO 527

BENDING TEST - CHARPY IMPACT



Dim. (mm): 80x10x4

HARDNESS



Dim.(mm): 45x45x4

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
TENSILE TEST	Tensile modulus	ISO 527-2/5A/50	MPa	2,172
	Strength	ISO 527-2/5A/50	MPa	53.8
	Strain at Strength	ISO 527-2/5A/50	%	3.7
	Stress at break	ISO 527-2/5A/50	MPa	44.6
	Strain at break	ISO 527-2/5A/50	%	4.8
BENDING TEST	Flexural modulus	ISO 178	MPa	1,640
	Flexural stress at conventionnal deflection (3,5% strain)*	ISO 178	MPa	67.7
	Flexural strain at flexural strength	ISO 178	%	>5*
CHARPY IMPACT	Charpy impact resistance	ISO 179-1/1eA	kJ/m ²	7.9
HARDNESS	Shore Hardness	ISO 868	Shore D	79.2

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

CERTIFICATION

FOOD CONTACT APPROVAL

EU 10/2011 (for all colors) & **FDA 21 CFR** (for all colors)