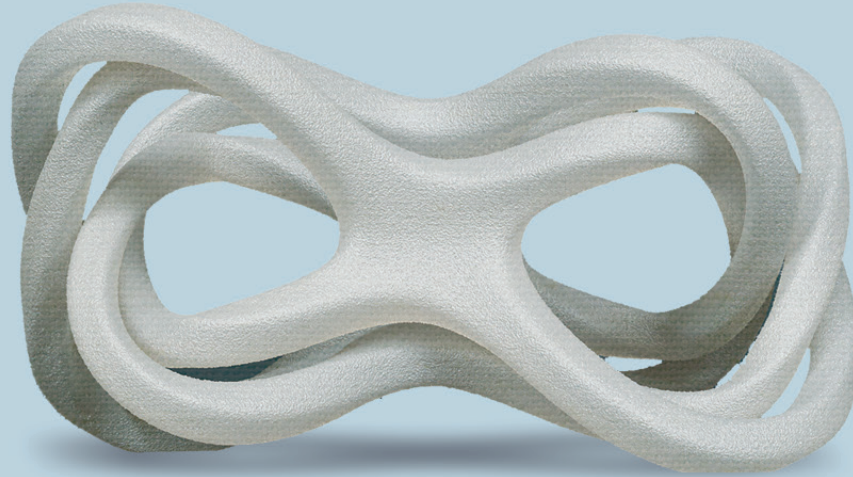




PETG-S



PETG-S confers to the filament the perfect balance between flexibility and mechanical strength

| FLEXIBLE & STRONG | INTERLAYER ADHESION
| LOW WATER ABSORPTION | FOOD CONTACT COMPLIANT

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	1.274
Moisture rate	INS-6711	%	< 0,7
Melt Flow Index (MFI) (@225°C – 2.16 kg)	ISO 1133-1	g/10min	12.1
Glass transition temperature Tg	ISO 11357-1 DSC (10°C/min – 20 à 280°C)	°C	80
Melting temperature Tm	ISO 11357-1 DSC (10°C/min – 20 à 280°C)	°C	n/a

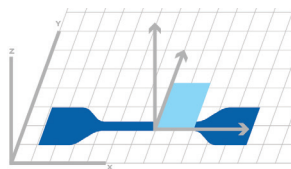


PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINTING DIRECTION	XY
PRINTING SPEED	50 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION TEMPERATURE	225°C
BED TEMPERATURE	60°C

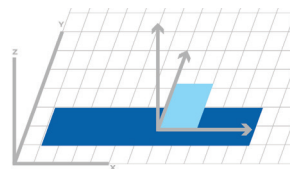
RESULTS

TENSILE TEST



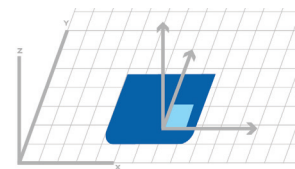
Dim.(mm): 75x12.5x2
Specimen type: ISO 527-5A

BENDING TEST - CHARPY IMPACT



Dim. (mm): 80x10x4

HARDNESS



Dim.(mm): 45x45x4

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
TENSILE TEST	Tensile modulus	ISO 527-2/5A/50	MPa	1,833
	Strength	ISO 527-2/5A/50	MPa	46.6
	Strain at Strength	ISO 527-2/5A/50	%	3.3
	Stress at break	ISO 527-2/5A/50	MPa	11.1
	Strain at break	ISO 527-2/5A/50	%	24.3
BENDING TEST	Flexural modulus	ISO 178	MPa	1,641
	Flexural stress at conventional deflection (3,5% strain)	ISO 178	MPa	57.5
	Flexural strain at flexural strength	ISO 178	%	>5*
CHARPY IMPACT	Charpy impact resistance	ISO 179-1/1eA	kJ/m ²	4.0
HARDNESS	Shore Hardness	ISO 868	Shore D	72.5

*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 colours) & **FDA 21 CFR** (for natural only)