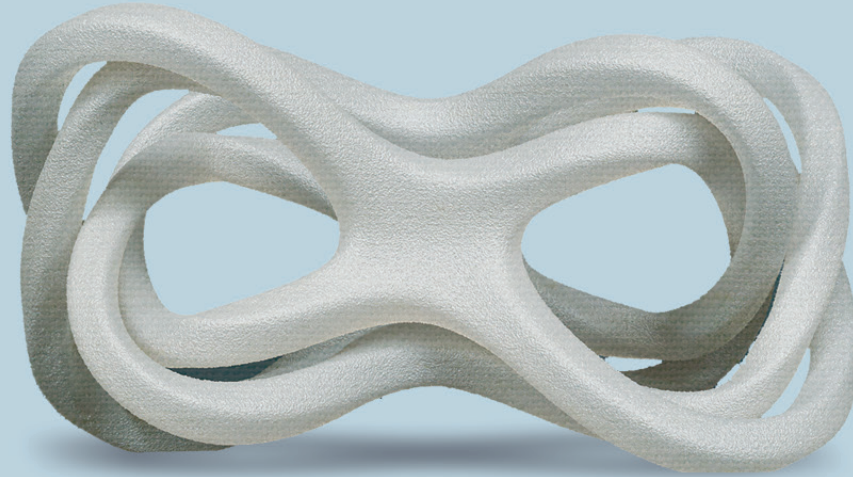




PLA-HI



PLA-HI is reinforced with impact modifier. It has 4 times higher impact resistance than PLA-S.

| EASY TO PRINT | SHINY APPEARANCE

| BRIGHT COLORS | BIOSOURCED

FILAMENT PROPERTIES

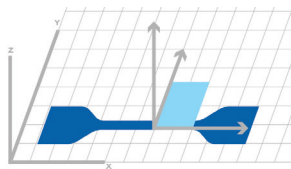
DESCRIPTION	TEST METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Density	ISO 1183-1	g/cm ³	1.210
Moisture rate	INS-6711	%	< 10,000
Melt Flow Index (MFI) (@210°C – 2,16 kg)	ISO 1133-1	g/10min	5.7
Glass transition temperature Tg	ISO 11357-1 DSC (10°C/min – 20 à 220°C)	°C	60
Melting temperature Tm	ISO 11357-1 DSC (10°C/min – 20 à 220°C)	°C	156

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINTING DIRECTION	XY
PRINTING SPEED	50 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION TEMPERATURE	200°C
BED TEMPERATURE	60°C

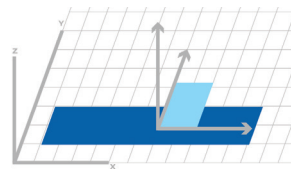
RESULTS

TENSILE TEST



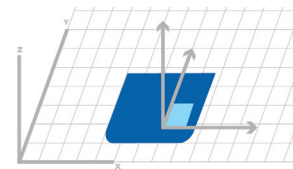
Dim.(mm): 75x12.5x2
Specimen type: ISO 527-5A

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	2,491
	Strength	ISO 527-2/5A/50	MPa	43.0
	Strain at Strength	ISO 527-2/5A/50	%	2.0
	Stress at break	ISO 527-2/5A/50	MPa	22.9
	Strain at break	ISO 527-2/5A/50	%	4.2
BENDING TEST	Flexural modulus	ISO 178	MPa	2,097
	Flexural stress at conventional deflection (3,5% strain)	ISO 178	MPa	62.8
	Flexural strain at flexural strength	ISO 178	%	4.0*
CHARPY IMPACT	Charpy impact resistance	ISO 179-1/1eA	kJ/m ²	16.5
HARDNESS	Shore Hardness	ISO 868	Shore D	76.8

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

CERTIFICATION

FOOD CONTACT

EU10/2011 (for all colors)

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