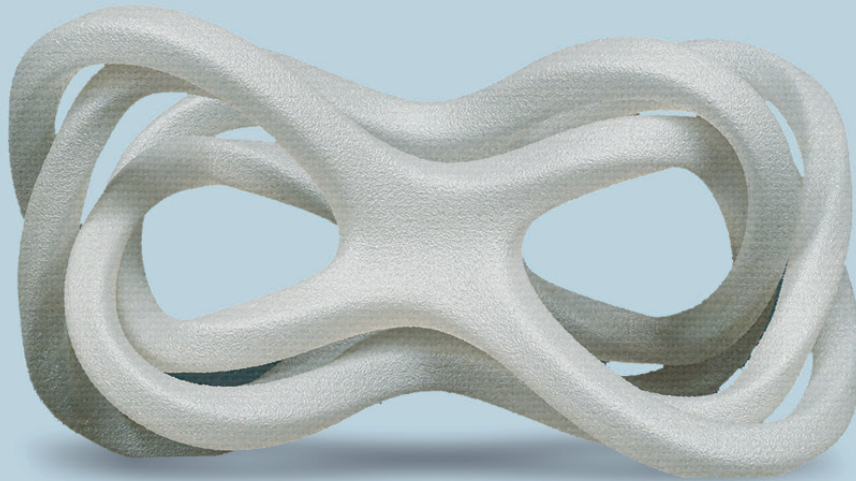




KYMIA **PLA-HI**



PLA-HI KYMIA 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

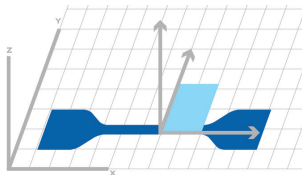
DESCRIPTION	TEST METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Density	ISO 1183-1	g/cm ³	1,21
Moisture rate	INS-6711	%	< 1
Melt Flow Index (MFI) (@210°C – 2,16 kg)	ISO 1133-1	g/10min	5.7
Glass transition temperature (Tg)	ISO 11357-1DSC (10°C/min – 20 à 220°C)	°C	60
Melting temperature (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

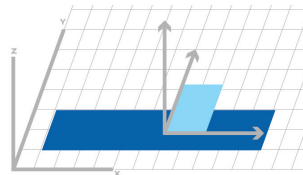
RESULTS

TENSILE TEST



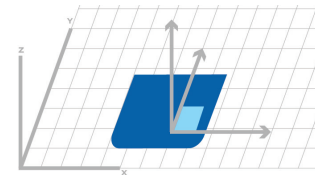
Dim.(mm): 75x12.5x2
Specimen type: ISO 527-5A

BENDING TEST - CHARPY IMPACT



Dim. (mm): 80x10x4

HARDNESS



Dim.(mm): 45x45x4

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
MECHANICAL PROPERTIES	Tensile modulus	ISO 527-2/5A/50	MPa	2,491
	Tensile strength	ISO 527-2/5A/50	MPa	43,0
	Tensile strain at strength	ISO 527-2/5A/50	%	2,0
	Tensile stress at break	ISO 527-2/5A/50	MPa	22,9
	Tensile strain at break	ISO 527-2/5A/50	%	4,2
	Flexural modulus	ISO 178	MPa	2,097
	Flexural stress at conventionnal deflection (3,5% strain)**	ISO 178	MPa	62,8
	Flexural strength	ISO 178	%	4.0*
	Charpy impact resistance	ISO 179-1/1eA	kJ/m ²	16,5
	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

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

CERTIFICATION

FOOD CONTACT	EU10/2011 (for all colors)
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