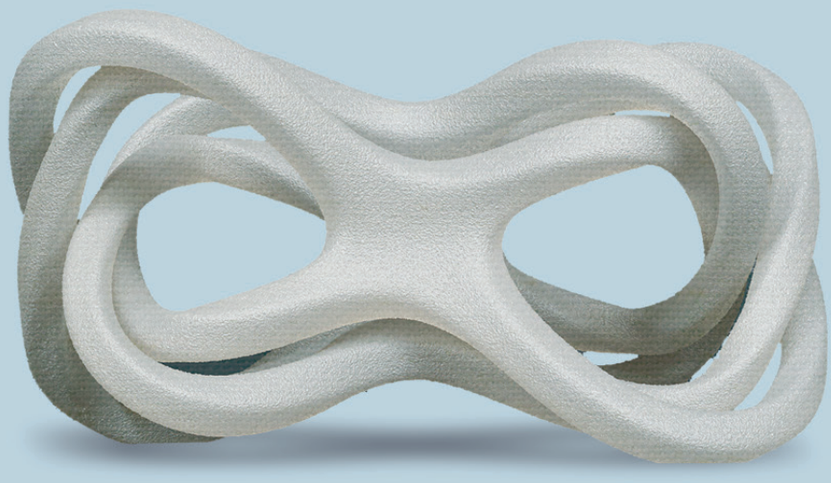
ABS-ESD BLACK KIMYA



THE ABS-ESD BLACK IS IDEAL FOR APPLICATIONS THAT REQUIRE PROTECTION AGAINST ELECTROSTATIC DISCHARGES.

| STIFFNESS | EASY TO PRINT

| ELECTROSTATIC DISCHARGE PROTECTION

FILAMENT PROPERTIES

PROPERTIES	TESTS METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Density	ISO 1183-1	g/cm³	1.06
Moisture rate	INS-6711	%	<0.5
Melt Flow Index (MFI) (@260°c – 10 kg)	ISO 1133-1	g/10min	4 - 8
Glass transition temperature Tg	ISO 11357-1	°C	107

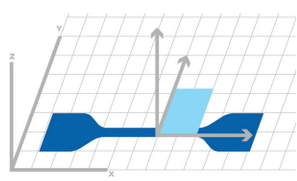
KIMYA
Additive Manufacturing by ARMOR

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINTING DIRECTION	XY
PRINTING SPEED	40 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION TEMPERATURE	260°C
BED TEMPERATURE	100°C

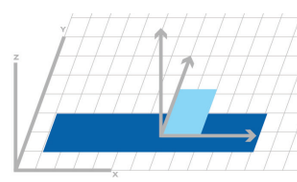
RESULTS

TENSILE TEST



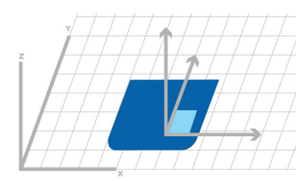
Dim.(mm) : 75x12.5x2
Specimen type ISO 527-5A

BENDING TEST - CHARPY IMPACT



Dim. (mm) : 80x10x4

HARDNESS



Dim.(mm) : 45x45x4

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
ELECTRICAL PROPERTIES	Surface resistivity	ASTM D257	Ohms/m2	10^6 - 10^9
TENSILE TEST	Tensile modulus	ISO 527-2/5A/50	MPa	1,858
	Strength	ISO 527-2/5A/50	MPa	32.8
	Strain at Strength	ISO 527-2/5A/50	%	1.9
	Stress at break	ISO 527-2/5A/50	MPa	26.7
	Strain at break	ISO 527-2/5A/50	%	4.7
BENDING TEST	Flexural modulus	ISO 178	MPa	1,515
	Flexural stress at conventionnal deflection (3,5% strain)*	ISO 178	MPa	42,6
	Flexural strain at flexural strength	ISO 178	%	>5*
CHARPY IMPACT	Charpy impact resistance	ISO 179-1/1eA	kJ/m²	4.9
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.

La FRENCH FAB

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