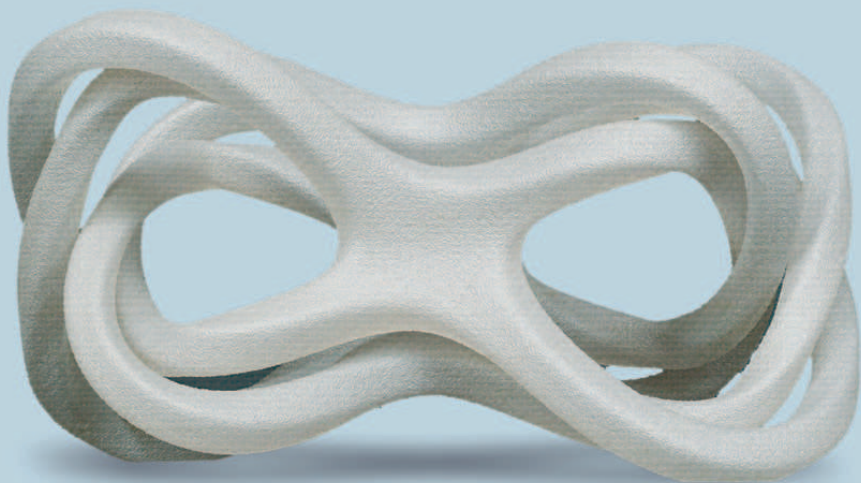




ABS ESD-S KIMYA



The **ABS ESD-S** is ideal for applications that require protection against electrostatic discharges. This material can be coloured on request.

| **IMPACT RESISTANT** | **EASY TO PRINT**
| **ELECTROSTATIC DISCHARGE PROTECTION**

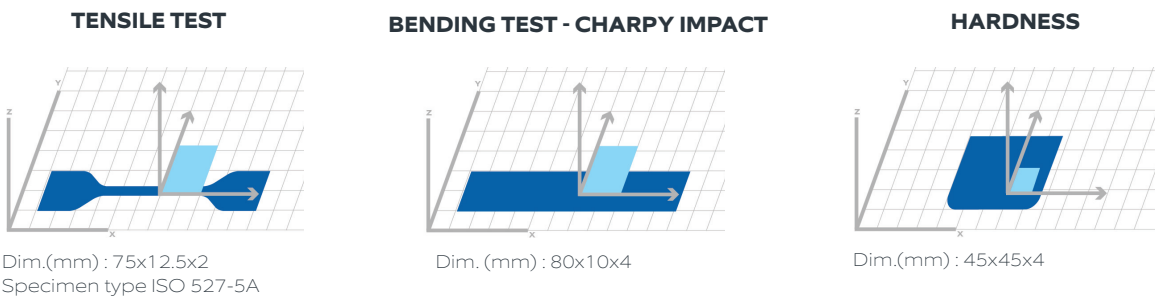
FILAMENT PROPERTIES

PROPERTIES	TESTS METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Specific gravity	ISO 1183	g/cm3	1.03
Humidity rate	INS-6711	%	<0.5
MFI (@220°C – 10 kg)	ISO 1133	g/10min	15 - 20
Glass temperature Tg	DSC	°C	107

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINT AXIS	XY
PRINT SPEED	40 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION TEMPERATURE	260°C
PLATFORM TEMPERATURE	100°C

RESULTS



PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
ELECTRICAL PROPERTIES	Surface resistivity	ASTM D257	Ohms/m2	10 ⁷ - 10 ⁹
TENSILE TEST	Tensile modulus	ISO 527	MPa	1,121
	Tensile strength	ISO 527	MPa	24.3
	Elongation @ tensile strength	ISO 527	%	3.1
	Tensile stress @ break	ISO 527	MPa	19.8
	Tensile elongation @ break	ISO 527	%	6.4
BENDING TEST	Flexural modulus	ISO 178	MPa	856
	Flexural stress @ 3.5%	ISO 178	MPa	27.3
	Flexural stress	ISO 178	%	>5*
CHARPY IMPACT	Charpy impact strength (Notched - type A)	ISO 179	kJ/m2	10.9
HARDNESS	Hardness	ISO 868	Shore D	66.7

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

The results presented are the averaged values of the ABS ESD-S range1.75 mm
For each test, 5 specimens per reference, previously placed at least 24 hours in climatic chambers (23 °C - hygrometry: 50%), have been tested.

