



## Kimya ABS-ESD 3D Filament

The ABS ESD is ideal for applications that require protection against electrostatic discharges.

- IMPACT RESISTANT (ABS ESD NATURAL)
- STIFFNESS (ABS ESD BLACK)
- EASY TO PRINT
- ELECTROSTATIC DISCHARGE PROTECTION

ARMOR 2 years warranty.

### FILAMENT PROPERTIES

PROPERTIES	TEST METHODS	VALUES
Diameter	INS-6712	1,75 ± 0,1 mm 2,85 ± 0,1 mm
Density	ISO 1183-1	1,03 g/cm <sup>3</sup>
Moisture rate	INS-6711	< 1 %
Melt flow index (MFI)	ISO 1133-1 (@220°C – 10 kg)	15 - 20 g/10min
Glass transition temperature (T <sub>g</sub> )	ISO 11357-1 DSC (10°C/min - 20-300°C)	107 °C

### PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINTING DIRECTION	XY
Printing Speed	40 mm/s
Infill	100% - rectilinear
Infill Angle	45°/-45°
Nozzle Temperature	260°C
Bed T°	100°C

## PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	VALUES
<b>ELECTRICAL PROPERTIES</b>	Surface resistivity	ASTM D257	$10^7 - 10^9$ Ohms/m <sup>2</sup>
<b>MECHANICAL PROPERTIES</b>	Tensile modulus	ISO 527-2/5A/50	1 121 MPa
	Tensile Strength	ISO 527-2/5A/50	24,3 MPa
	Tensile strain at strength	ISO 527-2/5A/50	3.1 %
	Tensile Stress at Break	ISO 527-2/5A/50	19,8 MPa
	Tensile strain at break	ISO 527	6.4 %
	Flexural stress at conventional deflection (3,5% strain)*	ISO 178	856 MPa
	Flexural strain at flexural strength	ISO 178	5 %
	Shore Hardness	ISO 868	66,7D
<b>Note 1</b>	*Fin de l'essai à 5% d'allongement d'après la norme ISO 178 même si l'éprouvette ne rompt pas.		
<b>Note 2</b>	Les données doivent être considérées comme des valeurs indicatives - Les propriétés peuvent être influencées par les conditions de production.		

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