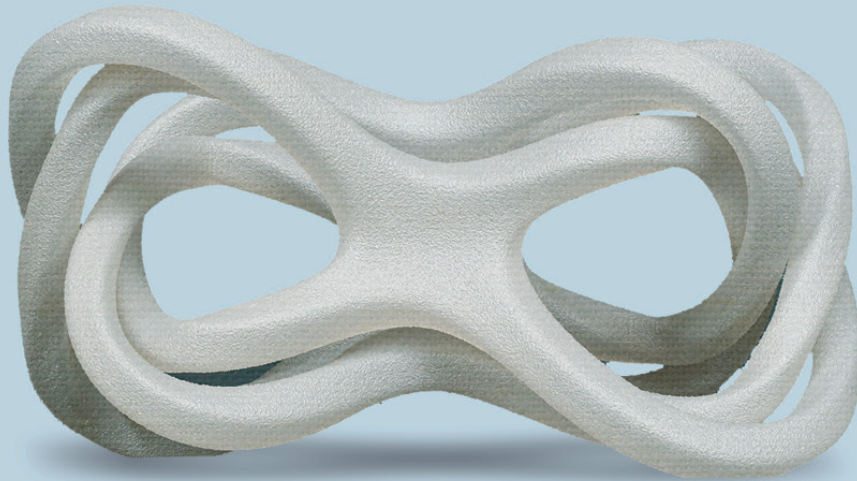




## KIMYA PEKK-SC



Thanks to its semi crystalline structure, PEKK-SC combines excellent mechanical properties and very good thermal, fire and chemical resistances.

| SEMI CRYSTALLINE STRUCTURE | EXCELLENT MECHANICAL PROPERTIES

| THERMAL RESISTANCE (UP TO 260°C) | FIRE RESISTANCE

### FILAMENT PROPERTIES @23°C

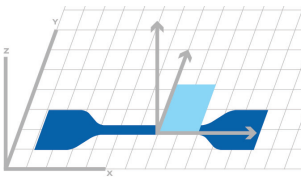
DESCRIPTION	TEST METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1,75 +/- 0,1 2,85 ± 0,1
Density	ISO 1183-1	g/cm <sup>3</sup>	1,27
Moisture rate	INS-6711	%	<1
Melt Flow Index (MFI)	ISO 1133-1 (380°C - 5 kg)	g/10min	35
Glass transition temperature (T <sub>g</sub> )	ISO 11357-1 (10°C/min - 20-420°C)	°C	161
Melting temperature (T <sub>m</sub> )	ISO 11357-1 (10°C/min - 20-420°C)	°C	332
Heat deflection temperature HDT (1,8 Mpa)	ISO 75f	°C	172

## PRINTED SPECIMENS PROPERTIES

PRINTING DIRECTION	Flat (XY)
PRINTING SPEED	45 mm/s
INFILL	100%
INFILL ANGLE	45°/-45°
NOZZLE TEMPERATURE	360°C
BED TEMPERATURE	95°C

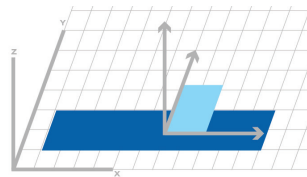
## RESULTS

### TENSILE TEST



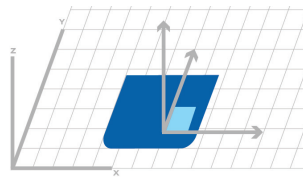
Dim.(mm) : 75x12,5x2

### BENDING TEST - CHARPY IMPACT



Dim. (mm) : 80x10x4

### HARDNESS



Dim.(mm) : 45x45x4

## PRINTED SPECIMENS PROPERTIES @23°C - UNANNEALED PARTS

	PROPERTIES	TEST METHODS	UNITS	VALUES FLAT (XY)
ELECTRICAL PROPERTIES	Dielectrical strength	IEC 60253-1 (100 M)	kV/mm	84
	Relative permittivity	IEC 60250 (1 MHZ)	-	2,6
	Loss tangent (tan)	IEC 60250 (1 KHZ)	-	0,007
	Volume Resistivity	ASTM D257	Ohms/cm	10 <sup>16</sup>
	Surface Resistivity	ASTM D257	Ohms/m <sup>2</sup>	10 <sup>16</sup>
	Tensile Modulus	ISO 527-2/1A/50	MPa	3400
MECHANICAL PROPERTIES	Tensile strength	ISO 527-2/1A/50	MPa	115
	Tensile strain at strength	ISO 527-2/1A/50	%	5,5
	Tensile strain at break	ISO 527-2/1A/50	%	7,5

\*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

FIRE/SMOKE STANDARDS

COMPLIANT WITH: UL94 V0 @0,8MM - EN45545 HL3 : R22 R23 - FAR 25,853