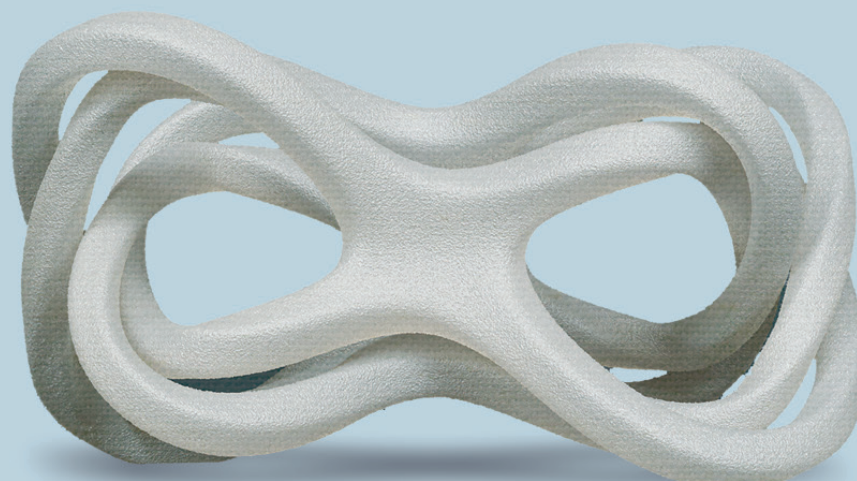




## PEI-9085 KIMYA



**PEI-9085 FILAMENT** is heat resistant and flame retardant UL94-V0

| CHEMICAL RESISTANCE | HEAT RESISTANCE  
| FLAME RETARDANT: COMPLIANT WITH UL94-V0

### 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 <sup>3</sup>	1.34
Moisture rate	INS-6711	%	< 1
Water Absorption (24h)	ISO 62	%	0.39
MVR (@360°C – 5kg)	ISO 1182	cm <sup>3</sup> /10min	65
Glass transition temperature Tg	ISO 11357-1	°C	175
HDT (1,8 MPa)	ASTM D648	°C	153
T°C max of use	-	°C	170
Vicat Softening T°C (Rate B/120)	ISO 306	°C	173

## PRINT PARAMETERS

<b>PRINTING SPEED</b>	20-35 mm/s
<b>EXTRUSION TEMPERATURE</b>	350-380°C
<b>BED TEMPERATURE</b>	120-160°C

## PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
<b>FLAME CHARACTERISTICS</b>	FAA Flammability	FAR 25.853	FAR 25.853	<5
	OSU total heat release (2min)	FAR 25.853	kw.min/m <sup>2</sup>	16
	OSU peak heat release rate (5min)	FAR 25.853	kw/m <sup>2</sup>	36
	Vertical burn (60s)	FAR 25.853	s	2
<b>TENSILE</b>	Oxygen Index (LOI)	ASTM D2863	%	49
	Tensile modulus	ASTM D738	MPa	3440
	Stress at yield	ASTM D738	MPa	84
	Stress at break	ASTM D738	MPa	74
	Strain at yield	ASTM D738	%	7
<b>BENDING TEST</b>	Strain at break	ASTM D738	%	72
	Flexural modulus	ASTM 790	MPa	2920
	Flexural strength	ASTM 790	MPa	138
<b>IMPACT RESISTANCE</b>	Izod Impact Strength / Notched	ISO 180/1A	kJ/m <sup>2</sup>	13
	Charpy impact resistance	ISO 179/2C	kJ/m <sup>2</sup>	11

## CERTIFICATION

**FLAMMABILITY**

**UL 94 V0 & FAR 25.853**