



Kimya PEI-9085 3D Filament

The Kimya **PEI-9085** 3D filament belongs to the family of thermoplastic polyimides. Polyetherimide (**PEI**) is an amorphous thermoplastic. It benefits from good resistance to temperature, high resistance to abrasion and high dimensional stability. It is used in sectors such as aerospace, railway, electronics and transport etc. The Kimya PEI-9085 3D filament has the following properties:

- Temperature resistance
- Flame retardant – eligible to **UL94 V0**
- Railway fire and smoke standard **EN45545**
- Aerospace **FAR 25.853** Standard
- Complies with the **RoHS** and **REACH** standard

2-year ARMOR warranty.

FILAMENT PROPERTIES

PROPERTIES	TEST METHODS	VALUES
Diameter	INS-6712	1,75 ± 0,1 mm 2,85 ± 0,1 mm
Density	ISO 1183-1	1,34 g/cm ³
Moisture rate	INS-6711	< 1 %
Heat distortion temperature (HDT) (1.8 MPa)	ASTM D648	153°C
Melting Temperature (Tm)	DSC	0°C

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINTING DIRECTION	XY
Printing Speed	20-35 mm/s
Infill Angle	45°/-45°
Nozzle Temperature	350-380°C
Bed T°	140-170°C

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	VALUES
MECHANICAL PROPERTIES	Tensile modulus	ASTM D738	3 440 MPa
	Tensile Stress at Break	ASTM D738	74 MPa
	Tensile strain at break	ASTM D738	72 %
	Flexural modulus	ASTM 790	2 920 MPa
	Charpy impact resistance	ISO 179/2C	11 kJ/m ²
Note 1	*Fin de l'essai à 5% d'allongement d'après la norme ISO 178 même si l'éprouvette ne rompt pas.		
Note 2	Les données doivent être considérées comme des valeurs indicatives - Les propriétés peuvent être influencées par les conditions de production.		

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