

PEI ULTEM™ 9085

PEI ULTEM™ 9085 (Polyether Imide) is a high-performance polymer with excellent mechanical performance. PEI ULTEM™ 9085 is a material from SABIC. This material is UL 94-V0 rated and has a glass transition temperature (Tg) of 186°C. PEI ULTEM™ 9085 is perfect for applications in for example the aerospace-, automotive- and electrical industry. This material is a combination of exceptional dimensional stability, inherent flame retardancy, excellent thermal properties and good chemical resistance.

Material features:

- Low smoke evolution
- High thermal properties
- Excellent chemical resistance
- Flame retardant
- High glass transition temperature (Tg)

Colours:

PEI ULTEM™ 9085 is available in the colour natural.

NA1

Packaging:

PEI ULTEM™ 9085 is available on polycarbonate and carton spools.

Ask our team to help you customizing your product.

Filament specs.

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,34 g/cc
MFI 340°C/5kg	ISO 1133	30 g/10 min
Tensile strength at yield	ISO 527	88 MPa
Tensile strength at break	ISO 527	71 MPa
Elongation strain at break	ISO 527	50%
Elongation strain at yield	ISO 527	6,7%
Tensile (E) modulus	ISO 527	3050 MPa
Impact strength - Charpy method 23°C	ISO 179	11 kJ/m2
Flammability behaviour	UL94	V-0
Flexural modulus	ISO 178	2750 MPa
Flexural strength	ISO 178	90 MPa
Vicat softening temp. B	ISO 306	173°C
Heat deflection temp. A (1,8MPa)	ISO 75	152°C
Printing temp.	Internal Method	380±15°C

Additional info:

Recommended temperature for heated bed is $\geq 120^{\circ}\text{C}$. Adhesion is possible on different surfaces.

PEI ULTEM™ 9085 can be used on desktop FDM or FFF technology 3D printers able to reach the high required temperatures. Dry the spool before printing: +4 hours at max. 110°C.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.

"The values presented in this publication are based on MCPP's knowledge and experience and are intended for reference purposes only. While MCPP has made every reasonable effort to ensure the accuracy of the information in this publication, MCPP does not guarantee that it is error-free, nor does MCPP make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. MCPP reserves the right to make any adjustments to the information contained herein at any time without notice. MCPP expressly disclaims warranties of any kind regarding the information contained herein, including, but not limited to, any warranties of merchantability or fitness of a particular purpose, use or application. MCPP shall not be liable for any damage, injury or loss induced from the use of MCPP's products in any application. Each user should thoroughly review this publication before selecting a product and, in view of the many factors that may affect processing and application of the product, each user should carry out their own investigations and tests and determining the safety, lawfulness, technical suitability, proprietary rights, and disposal/ recycling practices of the materials for the intended application."