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 ≥120˚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.