

PEKK (Polyetherketoneketone)

PEKK (Polyetherketoneketone) is a semi-crystalline thermoplastic in the PAEK (polyaryletherketone) family, with high heat resistance, chemical resistance and the ability to withstand high mechanical loads.

Features

- Glass transition temperature (Tg) of 170° C (higher than PEEK)
- Melting temperature (Tm) of 353° C (Higher than PEEK)
- Excellent performance in aggressive environments (high temperature, high pressure)
- Excellent chemical resistance

General properties

Property	Unit	ASTM standard	Arylmax® K7500
<u>General</u>			
Specific gravity	-	D792	1.3
Water Absorption (24hr. @23°C, %)	%	D570	0.1
<u>Mechanical</u>			
Tensile strength	MPa	D638	105
Tensile modulus	GPa		4.5
Tensile elongation	%		10
Flexural strength	MPa	D790	156
Flexural modulus	GPa		4.4
<u>Thermal</u>			
Melting point	°C	DSC	353
Tg		D3418	170

Processing			
Drying Temperature	180°C	Drying Time	4 hours
Feed Temperature	380°C	Middle Temperature	380°C
Front Temperature	380°C	Nozzle Temperature	380°C
Mold Temperature	200 - 210°C	Injection Rate	Fast
Screw Compression		2.5 - 3.5 : 1	