

## DATASHEET

# High Performance PEEK

(Cryogenic grade)

### KEY POINTS

- Enhanced toughness and ductility at cryogenic temperatures
- High temperature stability
- Rapid recovery on removal of load
- Creep resistance
- Corrosion and Chemical resistance
- Excellent tribological properties
- Suitable stiffness characteristics to allow effective sealing at very low, ambient and high temperatures

### PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE	UNIT
Color	-	Beige	-
Coefficient of thermal expansion At 23 °C At -100°C At -150°C	ISO 11359 DIN51909 DIN 51909	5.0 * 10 <sup>-5</sup> 4.5 * 10 <sup>-5</sup> 4.3 * 10 <sup>-5</sup>	°C <sup>-1</sup>
Thermal Conductivity At 23 °C At -100°C At -150°C	ISO 22007-2 DIN V ENV 1159-4 DIN V ENV 1159-4	0.29 0.20 0.16	W*m <sup>-1</sup> *K <sup>-1</sup>
Tensile strength Room Temperature 23°C Cryogenic Temperature -196°C	ASTM D1708	100 230	MPa
Elongation at break Room Temperature 23°C Cryogenic Temperature -196°C	ASTM D1708	30 9	%
Compressive strength Room Temperature 23°C Cryogenic Temperature -196°C	ASTM D695	130 300	MPa
Hardness – Shore D	ASTM D2240	84	Scale D
Friction Coefficient	ASTM G133-05	0.28	-
Melt temp	ASTM D 3418	343	°C
Service temp. range	/	-200 - 250	°C
Specific density	ASTM D792	1.30	g/cm <sup>3</sup>
Water absorption (24hr at 23°C)	ASTM D570	0.10	%



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**PRECISION MACHINED  
COMPONENTS**

Made out of **high performance plastics**

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