

# Technical Data Sheet

## GEHR PEEK®



### I. Physical Properties

	Test method	Unit	Value
1. Specific gravity	ISO 1183	g/cm <sup>3</sup>	1,32
2. Water absorption	ISO 62	%	0,1
3. Chemical resistance	-	-	-
4. Maximum permissible service temp. (no stronger mechanical stress involved)	-	-	-
Upper temperature limit	-	°C	260
Lower temperature limit	-	°C	-40

### II. Mechanical Properties

	Test method	Unit	Value
1. Tensile strength at yield	ISO 527	MPa	95
2. Elongation at yield.	ISO 527	%	-
3. Tensile strength at break	ISO 527	MPa	-
4. Elongation at break	ISO 527	%	25
5. Impact strength	ISO 179	kJ/m <sup>2</sup>	no break
6. Notch impact strength	ISO 179	kJ/m <sup>2</sup>	-
7. Ball indentation / Rockwell hardness	ISO 2039-1	MPa	- / M 99
8. Shore-D	DIN 53505		90
9. Flexural strength	ISO 178	MPa	170
10. Modulus of elasticity	ISO 527	MPa	3000

### III. Thermal Properties

	Test method	Unit	Value
1. Vicat-softening point	VST/B/50	°C	250
	VST/A/50	°C	-
2. Heat deflection temperature	HDT/B	°C	182
	HDT/A	°C	140
3. Coefficient of linear thermal expansion	DIN 53752	K <sup>-1</sup> *10 <sup>-4</sup>	0,5
4. Thermal conductivity at 20 °C		W/(m*K)	0,25

### IV. Electrical Properties

	Test method	Unit	Value
1. Volume resistivity	VDE 0303	Ω*cm	>= 10 <sup>16</sup>
2. Surface resistivity		Ω	>= 10 <sup>15</sup>
3. Dielectric constant at 1MHz		-	3,2
4. Dielectric loss factor at 1 MHz	DIN 53483	-	0,003
5. Dielectric strength	VDE 0303	kV/mm	20
6. Tracking resistance	IEC 60122	-	CTI 150

### V. Additional Data

	Test method	Unit	Value
1. Bond ability		-	+
2. Friction coefficient	DIN 53375	-	0,34
3. Flammability	UL 94	-	V-0
4. UV stabilisation	-	-	fair

All values are attributes of the used raw materials.

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