

TECATEC PEEK MT CW50 black - halvfabrikat

Kemisk beteckning

PEEK (polyetereterketon)

Färg

Svart solid

Densitet

1.52 g/cm³

Huvud egenskaper

- biokompatibel
- mycket hög styrka
- hög dimensionell stabilitet
- mycket bra steriliserbar
- inneboende flamskyddsmedel
- bra värmeledningstemperatur

Målindustrier

- maskinteknik
- medicinsk teknik

Mekaniska Egenskaper	parameter	värde	enhet	norm	anmärkning
Draghållfasthet	50mm/min, 50 N; average of w arp and w eft	500	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
Elasticitetsmodul (dragprov)	1mm/min; average of w arp and w eft	51700	MPa	DIN EN ISO 527-2	1) (2) For flexural test: support span 64mm, norm specimen.
Böjhållfasthet	10mm/min, 10 N; average of w arp and w eft	750	MPa	DIN EN ISO 178	2)
Elasticitetsmodul (böjningstest)	10mm/min, 10 N; average of w arp and w eft	48000	MPa	DIN EN ISO 178	
Kompressionsmodul	10mm/min, 5 N; average of w arp and w eft	3900	MPa	EN ISO 604	
Kompressionsmodul	10mm/min, 5 N; thickness	2400	MPa	EN ISO 604	
Värmeledningsförmåga	parameter	värde	enhet	norm	anmärkning
Glasövergångstemperatur		143	°C	DIN EN ISO 11357	1) (1) Found in public sources.
Smält temperatur		343	°C	DIN EN ISO 11357	
Service temperatur	long term	260	°C		
termisk expansion	23-80°C, w arp	0,5	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
termisk expansion	23-80°C, fill	0,5	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
termisk expansion	23-80°C, thickness	5	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
Övriga egenskaper	parameter	värde	enhet	norm	anmärkning
Vatten absorption	48h, 80°C	0.15	%	DIN EN ISO 62	(1) + good resistance (2) - poor resistance
Motstånd mot varmvatten / baser		+	-		1) (3) Corresponding means no listing at UL (yellow card).
Motståndskraft förvittring		-	-		2) The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.
Brandklassning (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	3)

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values that can be used primarily for comparison purposes for material selection. These values are within the normal tolerance range of product properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. Unless otherwise noted, these values were determined by tests at reference dimensions (typically rods with diameter 40-60 mm according to DIN EN 15860) on compression moulded and machined specimen. As the properties depend on the dimensions of the semi-finished products and the orientation in the component (esp. in reinforced grades), the material may not be used without a separate testing under individual circumstances. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. Data sheet values are subject to periodic review, the most recent update can be found at www.ensingerplastics.com. Technical changes reserved.