TECATEC PEEK CW50 PL V01 natural - Composite Materials

Kemisk beteckning
PEEK (polyetereterketon)

Färg
Natur

Densitet
1.52 g/cm^3

Fillers
kol fibrer

Huvud egenskaper
- utmärkt kemisk resistans
- låg termisk expansionskoefficient
- kontinuerlig service temperatur upp till 260 ° C
- mycket hög styvhet
- mycket hög styrka

Målindustrier
- bilindustrin
- maskinteknik
- olje- och gasindustrin
- säkerhetsteknik
- sporting goods

The material is in the phase of further development. The characteristic values of this product may change.

General material information	parameter	värde	enhet	norm	anmärkning
Fibre type		carbon HT 3k		-	
Fibre architecture		atlas 5HS		-	
Fibre areal weight		280	g/m²	-	
Fibre volume content		50	%	-	
Resin weight content		41.9	%	-	
Areal weight finished product		482	g/m²	-	
Material widths		625x525	mm	others on request	
thickness		1-95	mm	-	
Fibre orientation		0-90°		others on request	

Mekaniska Egenskaper	parameter	värde	enhet	norm	anmärkning
Draghållfasthet		713	MPa	ISO 527-4	
Elasticitetsmodul (dragprov)		59000	MPa	ISO 527-4	
Böjhållfasthet		866	MPa	ISO 14125	
Elasticitetsmodul (böjningstest)		55000	MPa	ISO 14125	
Kompressionsstyrka		645	MPa	ISO 14126	
slagstyrka (charpy)		65.5	kJ/m^2	-	
in-plane shear strength		137	MPa	ISO 14129	
Interlaminar shear strength		65	MPa	ISO 14130	

Värmeledningsförmåga	parameter	värde	enhet	norm	anmärkning
Glasövergångstemperatur		143	°C	-	(1) approximate value
Smält temperatur		343	°C	-	
Service temperatur	short term	300	°C	-	
Service temperatur	long term	260	°C	-	
termisk expansion	in 0° and 90° direction	5	10^{-6} K^{-1}	- 1)	

Förtorkning	parameter	värde	enhet	norm	anmärkning
Torktemperatur		150	°C	-	
Torktid		3	h	-	

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