

# TECAPEEK MT CF30 black - 型材(棒材,板材,管件)

**化學命名**  
PEEK (聚醚醚酮)

**顏色**  
黑色 不透明

**密度**  
1.42 g/cm<sup>3</sup>

**添加物**  
碳纖維

- 主要特色**
- 優異的耐化學性
  - 極高的剛性
  - 極高的耐蠕變性
  - 生物相容性
  - 良好的磨損性
  - 良好的熱變形溫度
  - 非常易於消毒

**目標產業**  
→ 醫療科技

機械特性	參數	值	單位	標準	註解
抗拉強度	50mm/min	115	MPa	DIN EN ISO 527-2	
彈性模數 (張力測試)	1mm/min	6000	MPa	DIN EN ISO 527-2	1)
降伏點抗拉強度	50mm/min	115	MPa	DIN EN ISO 527-2	
降伏點伸長率	50mm/min	5	%	DIN EN ISO 527-2	
斷裂伸長率	50mm/min	5	%	DIN EN ISO 527-2	
抗彎強度	2mm/min, 10 N	188	MPa	DIN EN ISO 178	2)
彈性模數 (彎曲測試)	2mm/min, 10 N	6000	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	22/43/108	MPa	EN ISO 604	3)
壓縮模數	5mm/min, 10 N	4500	MPa	EN ISO 604	4)
衝擊強度(Charpy)	max. 7.5J	58	kJ/m <sup>2</sup>	DIN EN ISO 179-1eU	5)
蕭氏硬度	D	91		DIN EN ISO 868	
熱特性	參數	值	單位	標準	註解
玻璃轉化溫度		146	°C	DIN EN ISO 11357	1)
熔化溫度		341	°C	DIN EN ISO 11357	
使用溫度	short term	300	°C		2)
使用溫度	long term	260	°C		
熱膨脹 (CLTE)	23-60°C, long.	5	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2	
熱膨脹 (CLTE)	23-100°C, long.	5	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2	
熱膨脹 (CLTE)	100-150°C, long.	7	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2	
比熱		1.7	J/(g*K)	ISO 22007-4:2008	
導熱係數		0.59	W/(K*m)	ISO 22007-4:2008	
電性特性	參數	值	單位	標準	註解
表面電阻	Conductive rubber, 23°C, 12% r.h.	10 <sup>2</sup> - 10 <sup>10</sup>	Ω	DIN EN 61340-2-3	1)
體積電阻	Conductive rubber, 23°C, 12% r.h.	10 <sup>3</sup> - 10 <sup>11</sup>	Ω*cm	DIN EN 61340-2-3	
其他特性	參數	值	單位	標準	註解
吸水率	24h / 96h (23°C)	0.02 / 0.03	%	DIN EN ISO 62	1)
耐熱水/鹼		+	-		2)
耐候性		-	-		3)
耐燃性(UL94)	corresponding to	V0		DIN IEC 60695-11-10;	4)

→ TECAPEEK 產品是使用 Victrex® PEEK 原物料製作而成。

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