

TECAPEEK 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
1.38 g/cm³

添加物
碳纖維

- 主要特色**
- 良好的耐化學性
 - 改良過的強度
 - 固有的防火性
 - 耐水解和熱蒸氣
 - 極高的剛性
 - 極高的耐蠕變性
 - 良好的尺寸穩定性
 - 高能輻射抗性

- 目標產業**
- 機械工程
 - 石油和天然氣工業
 - 化學技術
 - 汽車工業
 - 航空與航太科技
 - 真空科技

機械特性	參數	值	單位	標準	註解
抗拉強度	50mm/min	112	MPa	DIN EN ISO 527-2	
彈性模數 (張力測試)	1mm/min	6000	MPa	DIN EN ISO 527-2	1)
斷裂伸長率	50mm/min	10	%	DIN EN ISO 527-2	
抗彎強度	2mm/min, 10 N	184	MPa	DIN EN ISO 178	2)
彈性模數 (彎曲測試)	2mm/min, 10 N	6100	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	25/47/111	MPa	EN ISO 604	3)
衝擊強度(Charpy)	max. 7,5J	92	kJ/m ²	DIN EN ISO 179-1eU	4)
蕭氏硬度	D	90		DIN EN ISO 868	
熱特性	參數	值	單位	標準	註解
玻璃轉化溫度		147	°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.	4	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
熱膨脹 (CLTE)	23-100°C, long.	4	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
熱膨脹 (CLTE)	100-150°C, long.	6	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
比熱	1.2	J/(g*K)		ISO 22007-4:2008	
導熱係數	0.66	W/(K*m)		ISO 22007-4:2008	
電性特性	參數	值	單位	標準	註解
表面電阻	10 ³ - 10 ¹²	Ω		DIN EN 61340-2-3	
體積電阻	10 ³ - 10 ¹²	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產品使用Victrex®PEEK 450或Solvay KetaSpire®製成

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