

TECAPEEK CMF grey - 型材(棒材,板材,管件)

化學命名
PEEK (聚醚醚酮)

顏色
灰色 不透明

密度
1.65 g/cm³

添加物
陶瓷

- 主要特色**
- 良好的加工特性
 - 高強度
 - 高剛性
 - 低熱膨脹
 - 毛邊較少
 - 良好的熱變形溫度
 - 優異的耐熱性

- 目標產業**
- 半導體科技
 - 電子學
 - 機械工程
 - 真空科技

機械特性	參數	值	單位	標準	註解
抗拉強度	50mm/min	105	MPa	DIN EN ISO 527-2	
彈性模數 (張力測試)	1mm/min	5500	MPa	DIN EN ISO 527-2	1)
降伏點抗拉強度	50mm/min	102	MPa	DIN EN ISO 527-2	
降伏點伸長率	50mm/min	4	%	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	170	MPa	DIN EN ISO 178	2)
彈性模數 (彎曲測試)	2mm/min, 10 N	5500	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	25/46/105	MPa	EN ISO 604	3)
壓縮模數	5mm/min, 10 N	4300	MPa	EN ISO 604	4)
衝擊強度(Charpy)	max. 7,5J	35	kJ/m ²	DIN EN ISO 179-1eU	5)
球壓式硬度		286	MPa	ISO 2039-1	6)
熱特性	參數	值	單位	標準	註解
玻璃轉化溫度		151	°C	DIN EN ISO 11357	1)
熔化溫度		339	°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 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
熱膨脹 (CLTE)	23-100°C, long.	5	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	1.0	J/(g*K)		ISO 22007-4:2008	
導熱係數	0.38	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 ¹⁴	Ω		-	
體積電阻	10 ¹⁴	Ω*cm		-	
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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