

TECAPEEK GF30 natural - 型材 (棒材, 板材, 管件)

化學命名

PEEK (聚醚醚酮)

顏色

米黃色 不透明

密度

1.53 g/cm³

添加物

玻璃纖維

主要特色

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

目標產業

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

機械特性	參數	值	單位	標準	註解
抗拉強度	5mm/min	113	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
彈性模數 (張力測試)	1mm/min	6300	MPa	DIN EN ISO 527-2	(2) Specimen 10x10x10mm
斷裂伸長率	5mm/min	5	%	DIN EN ISO 527-2	(3) For Charpy test: support span 64mm, norm specimen.
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	29/52/120	MPa	EN ISO 604	(4) Specimen in 4mm thickness
衝擊強度(Charpy)	max. 7,5J	52	kJ/m ²	DIN EN ISO 179-1eU	3)
球壓式硬度		280	MPa	ISO 2039-1	4)
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)
融化溫度		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.	5	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		0.35	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	DIN IEC 60093	(1) Specimen in 1mm thickness
體積電阻		10 ¹⁴	Ω*cm	DIN IEC 60093	
介電強度	23°C, 50% r.h.	36	kV/mm	ISO 60243-1	1)
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) (1) Ø ca. 50mm, h=13mm (2) + good resistance (3) - poor resistance (4) Corresponding means no listing at UL (yellow card).
耐熱水/鹼		+	-	-	2)
耐候性		-	-	-	3)
耐燃性(UL94)	corresponding to	V0		DIN IEC 60695-11-10;	4) The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.

→ TECAPEEK產品使用Victrex®PEEK 450或Solvay KetaSpire®製成

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