

TECAPEEK MT 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

1.32 g/cm³

此化合物目前處於驗證階段，其產品特性有可能會有所改變。

主要特色

- 生物相容性
- 高蠕變抗性
- 優異的耐化學性
- 良好的滑動及耐磨特性
- 優異的耐應力破裂
- 耐水解和熱蒸氣
- 良好的加工特性

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	118	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
彈性模數 (張力測試)	1mm/min	4100	MPa	DIN EN ISO 527-2	(2) For Charpy test: support span 64mm, norm specimen. n.b. = not broken
降伏點抗拉強度	50mm/min	118	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	15	%	DIN EN ISO 527-2	
衝擊強度(Charpy)	max. 7.5J	n.b.	kJ/m ²	DIN EN ISO 179-1eU	2)
蕭氏硬度	D	89		DIN EN ISO 868	

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		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 ⁻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.	7	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
比熱		1.1	J/(g*K)	ISO 22007-4:2008	
導熱係數		0.27	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 ¹²	Ω	-	

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). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.
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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