

TECAPEEK MT yellow - 型材(棒材,板材,管件)

化學命名
PEEK (聚醚醚酮)

顏色
淺黃色 不透明

密度
1.38 g/cm³

- 主要特色**
- 高蠕變抗性
 - 優異的耐化學性
 - 高能輻射抗性
 - 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
 - 非常易於消毒

- 目標產業**
- 食品科技
 - 醫療科技
 - 機械工程

機械特性	參數	值	單位	標準	註解
抗拉強度	50mm/min	113	MPa	DIN EN ISO 527-2	
彈性模數 (張力測試)	1mm/min	4400	MPa	DIN EN ISO 527-2	1)
降伏點抗拉強度	50mm/min	113	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	10	%	DIN EN ISO 527-2	
抗彎強度	2mm/min, 10 N	169	MPa	DIN EN ISO 178	2)
彈性模數 (彎曲測試)	2mm/min, 10 N	4300	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	17/35/90	MPa	EN ISO 604	3)
壓縮模數	5mm/min, 10 N	3400	MPa	EN ISO 604	4)
衝擊強度(Charpy)	max. 7,5J	n.b.	kJ/m ²	DIN EN ISO 179-1eU	5)
缺口衝擊強度(Charpy)	max. 7,5J	5	kJ/m ²	DIN EN ISO 179-1eA	
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 53765	1)
熔化溫度		341	°C	DIN 53765	
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	0.28	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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