

TECASON P MT ivory - 型材(棒材,板材,管件)

化學命名

PPSU (聚苯碩)

顏色

象牙色 不透明

密度

1.31 g/cm³

主要特色

- 高熱與機械能力
- 良好的熱變形溫度
- 耐水解和熱蒸氣
- 良好的衝擊強度
- 高剛性
- 高強度
- 良好的耐化學性
- 高伽瑪輻射抗性

目標產業

- 醫療科技
- 化學技術
- 電子學
- 食品科技
- 機械工程
- 汽車工業

機械特性

參數

值

單位

標準

註解

抗拉強度	50mm/min	81	MPa	DIN EN ISO 527-2	
彈性模數 (張力測試)	1mm/min	2300	MPa	DIN EN ISO 527-2	1)
降伏點抗拉強度	50mm/min	81	MPa	DIN EN ISO 527-2	
降伏點伸長率	50mm/min	7	%	DIN EN ISO 527-2	
斷裂伸長率	50mm/min	> 50	%	DIN EN ISO 527-2	
抗彎強度	2mm/min, 10 N	107	MPa	DIN EN ISO 178	2)
彈性模數 (彎曲測試)	2mm/min, 10 N	2300	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	18/30/66	MPa	EN ISO 604	3)
壓縮模數	5mm/min, 10 N	2000	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	13	kJ/m ²	DIN EN ISO 179-1eA	
蕭氏硬度	D	83		DIN EN ISO 868	

熱特性

參數

值

單位

標準

註解

玻璃轉化溫度	218	°C	DIN EN ISO 11357	1)
熔化溫度	n.a.	°C	DIN EN ISO 11357	2)
使用溫度	short term	190	°C	3)
使用溫度	long term	170	°C	
熱膨脹 (CLTE)	23-60°C, long.	6	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2
熱膨脹 (CLTE)	23-100°C, long.	6	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	0.25	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)	0.1 / 0.2	%	DIN EN ISO 62	1)
耐熱水/鹼	+	-			2)
耐候性	-	-			3)
耐燃性(UL94)	listed (value at 0.75mm)	V0		DIN IEC 60695-11-10;	

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