

TECASON P MT brown - 型材(棒材,板材,管件)

化學命名
PPSU (聚苯碩)

顏色
棕色 不透明

密度
1.31 g/cm³

- 主要特色**
- 高熱與機械能力
 - 生物相容性
 - 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
 - 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% 5mm/min, 10 N	18 / 30	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	
球壓式硬度		143	MPa	ISO 2039-1	6)
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	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω	-	1)
體積電阻	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω*cm	-	2)
					(1) Specimen in 20mm thickness (2) Due to the brown colourant and moisture uptake of the material the electrical insulation properties cannot be 100% guaranteed, despite single measurements suggesting otherwise.
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 0.79mm)	V0		DIN IEC 60695-11-10;	

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