

TECAPAI CM XP730 black - 型材 (棒材, 板材, 管件)

化學命名

PAI (聚醯胺醯亞胺)

顏色

黑色 不透明

密度

1.47 g/cm³

添加物

碳纖維

生產製程: 壓縮成型

主要特色

- 絕佳的強度跟剛性
- 優異的耐熱性
- 絕佳的尺寸穩定性
- 絕佳的耐化學性

目標產業

- 航空與航太科技
- 加工工程
- 化工和煉油業
- 石油和天然氣工業

機械特性	參數	值	單位	標準	註解
彈性模數 (張力測試)	1mm/min	12100	MPa	DIN EN ISO 527-2	1)
斷裂抗拉強度	5mm/min	176	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
斷裂伸長率	5mm/min	2,8	%	DIN EN ISO 527-2	(2) For flexural test: support span 64mm, norm specimen.
抗彎強度	2mm/min, 10 N	296	MPa	DIN EN ISO 178	(3) Specimen 10x10x10mm
彈性模數 (彎曲測試)	2mm/min, 10 N	9900	MPa	DIN EN ISO 178	(4) For Charpy test: support span 64mm, norm specimen.
壓縮強度	1% / 2% / 5%	18/46/136	MPa	EN ISO 604	(5) Specimen in 4mm thickness
衝擊強度(Charpy)	max. 7,5J	50	kJ/m ²	DIN EN ISO 179-1eU	4)
球壓式硬度		321	MPa	ISO 2039-1	5)
蕭氏硬度	D scale	94		DIN EN ISO 868	
熱特性	參數	值	單位	標準	註解
玻璃轉化溫度		286	°C	-	
熱膨脹 (CLTE)	23-100°C, longitudinal	2,1	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
熱膨脹 (CLTE)	23-60°C, longitudinal	2,3	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
其他特性	參數	值	單位	標準	註解
吸濕性	24h / 96h (23°C)	0,3 / 0,44	%	DIN EN ISO 62	
耐燃性(UL94)	3,2 mm	V0		-	

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