

## TECAPAI CM XP530 black-green - 型材(棒材,板材,管件)

### 化學命名

PAI (聚醯胺醯亞胺)

### 顏色

黑綠色 不透明

### 密度

1.62 g/cm<sup>3</sup>

### 添加物

玻璃纖維

生產製程:壓縮成型

### 主要特色

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

### 目標產業

- 半導體科技
- 航空與航太科技
- 石油和天然氣工業
- 化工和煉油業
- 加工工程

### 機械特性

參數	值	單位	標準	註解
彈性模數 (張力測試)	1mm/min	MPa	DIN EN ISO 527-2	1)
斷裂抗拉強度	5mm/min	MPa	DIN EN ISO 527-2	
斷裂伸長率	5mm/min	%	DIN EN ISO 527-2	
抗彎強度	2mm/min, 10 N	MPa	DIN EN ISO 178	2)
彈性模數 (彎曲測試)	2mm/min, 10 N	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5%	19/43/117	MPa	EN ISO 604
衝擊強度(Charpy)	max. 7,5J	40	kJ/m <sup>2</sup>	DIN EN ISO 179-1
球壓式硬度		246	MPa	ISO 2039-1
蕭氏硬度	D scale	87		DIN EN ISO 868

### 熱特性

參數	值	單位	標準	註解
玻璃轉化溫度	284	°C	DIN EN ISO 11357	
熱膨脹 (CLTE)	23-60°C, longitudinal	3,1	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2
熱膨脹 (CLTE)	23-100°C, longitudinal	3,2	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2
熱膨脹 (CLTE)	100-150°C, longitudinal	3,5	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2

### 電性特性

參數	值	單位	標準	註解
介電強度	32	kV/mm	ISO 60243-1	1)
耗散因子 @ 1 MHz	0,012		DIN 53 481	
耗散因子 @ 100 Hz	0,0054		DIN 53 481	
介電常數 @ 1 MHz	3,57		DIN 53 481	
介電常數 @ 100 Hz	3,80		DIN 53 481	

### 其他特性

參數	值	單位	標準	註解
吸水率	24h (23°C)	0,12/0,28	%	DIN EN ISO 62 1) Ø ca. 50mm, h=13mm

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