

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

### 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	5950	MPa	DIN EN ISO 527-2	1) (1) For tensile test: specimen type 1b
斷裂抗拉強度	5mm/min	116	MPa	DIN EN ISO 527-2	(2) For flexural test: support span 64mm, norm specimen.
斷裂伸長率	5mm/min	3,6	%	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
抗彎強度	2mm/min, 10 N	174	MPa	DIN EN ISO 178	2) (4) For Charpy test: support span 64mm, norm specimen.
彈性模數 (彎曲測試)	2mm/min, 10 N	5900	MPa	DIN EN ISO 178	(5) Specimen in 4mm thickness
壓縮強度	1% / 2% / 5%	19/43/117	MPa	EN ISO 604	3)
衝擊強度(Charpy)	max. 7,5J	40	kJ/m <sup>2</sup>	DIN EN ISO 179-1	4)
球壓式硬度		246	MPa	ISO 2039-1	5)
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) (1) Specimen in 1mm thickness
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) (1) Ø ca. 50mm, h=13mm

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