

## 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/cm<sup>3</sup>

### 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	
斷裂伸長率	5mm/min	2,8	%	DIN EN ISO 527-2	
抗彎強度	2mm/min, 10 N	296	MPa	DIN EN ISO 178	2)
彈性模數 (彎曲測試)	2mm/min, 10 N	9900	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5%	18/46/136	MPa	EN ISO 604	3)
衝擊強度(Charpy)	max. 7,5J	50	kJ/m <sup>2</sup>	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)	23-60°C, longitudinal	2,3	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2	
熱膨脹 (CLTE)	23-100°C, longitudinal	2,1	10 <sup>-5</sup> K <sup>-1</sup>	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		-	

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values that can be used primarily for comparison purposes for material selection. These values are within the normal tolerance range of product properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. Unless otherwise noted, these values were determined by tests at reference dimensions (typically rods with diameter 40-60 mm according to DIN EN 15860) on compression moulded and machined specimen. As the properties depend on the dimensions of the semi-finished products and the orientation in the component (esp. in reinforced grades), the material may not be used without a separate testing under individual circumstances. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. Data sheet values are subject to periodic review, the most recent update can be found at [www.ensinger-online.com](http://www.ensinger-online.com). Technical changes reserved.