TECATRON PVX black - 型材 (棒材,板材,管件)

化學命名
PPS (聚苯硫醚)

顏色
黑色 不透明

密度
1.5 g/cm^3

添加物
碳纖維, 鐵氟龍, 石墨

主要特色
- 優異的耐化學性
- 良好的熱變形溫度
- 優異的滑動和耐磨特性
- 固有的防火性
- 良好的尺寸穩定性
- 高剛性
- 高蠕變抗性

目標產業
- 機械工程
- 石油和天然氣工業
- 真空科技
- 汽車工業
- 航空與航太科技

機械特性	***參數***	***值***	***單位***	***標準***		***註解***
抗拉強度	50mm/min	53	MPa	DIN EN ISO 527-2		(1) For tensile test: specimen type 1b (2) For flexural test: support span 64mm, norm specimen. (3) Specimen 10x10x10mm (4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression. (5) For Charpy test: support span 64mm, norm specimen.
彈性模數 (張力測試)	1mm/min	4600	MPa	DIN EN ISO 527-2	1)	
降伏點抗拉強度	50mm/min	53	MPa	DIN EN ISO 527-2		
降伏點伸長率	50mm/min	2	%	DIN EN ISO 527-2		
斷裂伸長率	50mm/min	2	%	DIN EN ISO 527-2		
抗彎強度	2mm/min, 10 N	91	MPa	DIN EN ISO 178	2)	
彈性模數 (彎曲測試)	2mm/min, 10 N	4800	MPa	DIN EN ISO 178		
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	19/36/89	MPa	EN ISO 604	3)	
壓縮模數	5mm/min, 10 N	3300	MPa	EN ISO 604	4)	
衝擊強度(Charpy)	max. 7,5J	14	kJ/m^2	DIN EN ISO 179-1eU	5)	
蕭氏硬度	D	85		DIN EN ISO 868		

熱特性	***參數***	***值***	***單位***	***標準***		***註解***
玻璃轉化溫度		94	°C	DIN EN ISO 11357	1)	(1) Found in public sources. (2) Found in public sources. Individual testing regarding application conditions is mandatory.
熔化溫度		281	°C	DIN EN ISO 11357		
使用溫度	short term	260	°C		2)	
使用溫度	long term	230	°C			
熱膨脹 (CLTE)	23-60°C, long.	5	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		
熱膨脹 (CLTE)	100-150°C, long.	13	10^{-5} K^{-1}	DIN EN ISO 11359-1;2		
比熱		0.9	J/(g*K)	ISO 22007-4:2008		
導熱係數		0.58	W/(K*m)	ISO 22007-4:2008		

電性特性	***參數***	***值***	***單位***	***標準***	***註解***
表面電阻		10^4 -10^{10}	Ω	DIN EN 61340-2-3	
體積電阻		10^7-10^{12}	Ω*cm	DIN EN 61340-2-3	

其他特性	***參數***	***值***	***單位***	***標準***		***註解***
吸水率	24h / 96h (23°C)	<0.01 / <0.01	%	DIN EN ISO 62	1)	(1) Ø ca. 50mm, h=13mm (2) + good resistance (3) (+) limited resistance (4) Corresponding means no listing at UL (yellow card). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.
耐熱水/鹼		+		-	2)	
耐候性		(+)		-	3)	
耐燃性(UL94)	corresponding to	V0		DIN IEC 60695-11-10;	4)	

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 extruded 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.ensingerplastics.com. Technical changes reserved.