

TECAFLON PVDF natural - 型材 (棒材, 板材, 管件)

化學命名

PVDF (聚二氟亞乙烯)

顏色

白色 不透明

密度

1.78 g/cm³

主要特色

- 優異的耐化學性
- 固有的防火性
- 連續使用溫度至150 °C
- 良好的滑動及耐磨特性
- 優異的可焊接性
- 優異的電氣絕緣
- 優異的耐候和耐UV性

目標產業

- 化學技術
- 電子學
- 能源工業
- 食品科技
- 機械工程

機械特性	參數	值	單位	標準	註解
抗拉強度	50mm/min	62	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
彈性模數 (張力測試)	1mm/min	2200	MPa	DIN EN ISO 527-2	1) (2) For flexural test: support span 64mm, norm specimen.
降伏點抗拉強度	50mm/min	62	MPa	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
降伏點伸長率	50mm/min	8	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
斷裂伸長率	50mm/min	17	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, norm specimen.
抗彎強度	2mm/min, 10 N	77	MPa	DIN EN ISO 178	2)
彈性模數 (彎曲測試)	2mm/min, 10 N	2100	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	16/28/59	MPa	EN ISO 604	3)
壓縮模數	5mm/min, 10 N	1900	MPa	EN ISO 604	4)
衝擊強度(Charpy)	max. 7.5J	150	kJ/m ²	DIN EN ISO 179-1eU	5)
蕭氏硬度	D	80		DIN EN ISO 868	
熱特性	參數	值	單位	標準	註解
玻璃轉化溫度		-40	°C	DIN EN ISO 11357	1) (1) Found in public sources.
熔化溫度		171	°C	DIN EN ISO 11357	(2) Found in public sources.
使用溫度	short term	150	°C		2) Individual testing regarding application conditions is mandatory.
使用溫度	long term	140	°C	-	
熱膨脹 (CLTE)	23-60°C, long.	16	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
熱膨脹 (CLTE)	23-100°C, long.	18	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
比熱		1.3	J/(g*K)	ISO 22007-4:2008	
導熱係數		0.25	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 ¹⁴	Ω	-	
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) 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		+	-	-	
可燃性(UL94)	corresponding to	V0		DIN IEC 60695-11-10;	3)

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