

TECAMID 66 GF30 black - 型材(棒材,板材,管件)

化學命名

PA 66 (聚醯胺 66)

顏色

黑色 不透明

密度

1.34 g/cm³

添加物

玻璃纖維

加工後所產生的數據(依德國標準氣候為主)。

主要特色

- 極高的剛性
- 耐油、潤滑油及燃油
- 良好的磨損性
- 極高的強度
- 良好的尺寸穩定性
- 良好的熱變形溫度
- 良好的可焊接性和黏結性

目標產業

- 機械工程
- 航空與航太科技
- 汽車工業

機械特性	參數	值	單位	標準	註解
抗拉強度	50mm/min	91	MPa	DIN EN ISO 527-2	
彈性模數 (張力測試)	1mm/min	5500	MPa	DIN EN ISO 527-2	1)
降伏點抗拉強度	50mm/min	91	MPa	DIN EN ISO 527-2	
降伏點伸長率	50mm/min	8	%	DIN EN ISO 527-2	
斷裂伸長率	50mm/min	14	%	DIN EN ISO 527-2	
抗彎強度	2mm/min, 10 N	135	MPa	DIN EN ISO 178	2)
彈性模數 (彎曲測試)	2mm/min, 10 N	4700	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	25/46/104	MPa	EN ISO 604	3)
壓縮模數	5mm/min, 10 N	4100	MPa	EN ISO 604	4)
衝擊強度(Charpy)	max. 7,5J	97	kJ/m ²	DIN EN ISO 179-1eU	5)
蕭氏硬度	D	86		DIN EN ISO 868	
熱特性	參數	值	單位	標準	註解
玻璃轉化溫度	48	°C		DIN EN ISO 11357	1)
熔化溫度	254	°C		DIN EN ISO 11357	
使用溫度	short term	180	°C	-	2)
使用溫度	long term	110	°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.	5	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
比熱	1.2	J/(g*K)		ISO 22007-4:2008	
導熱係數	0.39	W/(K*m)		ISO 22007-4:2008	
電性特性	參數	值	單位	標準	註解
表面電阻	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω	-	1)
體積電阻	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω*cm	-	2)
介電強度	23°C, 50% r.h.	35	kV/mm	ISO 60243-1	3)
耐電痕(CTI)	Platin electrode, 23°C, 50% r.h., solvent A	550 / 475	V	DIN EN 60112	
其他特性	參數	值	單位	標準	註解
吸水率	24h / 96h (23°C)	0.1 / 0.2	%	DIN EN ISO 62	1)
耐熱水/鹼	(+)	-		-	2)
耐候性	(+)	-		-	
耐燃性(UL94)	corresponding to	HB		DIN IEC 60695-11-10;	3)

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