

TECAMID 6 FRT natural - 型材 (棒材, 板材, 管件)

化學命名

PA 6 (聚醯胺 6)

顏色

象牙色 不透明

密度

1.19 g/cm³

添加物

阻燃劑 (無鹵素)

加工後所產生的數據(依德國標準氣候為主)。

主要特色

- 根據 EN 45545 檢測
- 根據 FAR 25.853 防火測試
- 根據 UL94 V-0 耐燃測試
- 耐油、潤滑油及燃油
- 良好的滑動及耐磨特性
- 高強度
- 良好的加工特性

目標產業

- 航空與航太科技
- 運輸工具
- 電子學
- 機械工程
- 汽車工業

機械特性	參數	值	單位	標準	註解
抗拉強度	50mm/min	79	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
彈性模數 (張力測試)	1mm/min	3900	MPa	DIN EN ISO 527-2	(2) For flexural test: support span 64mm, norm specimen.
降伏點抗拉強度	50mm/min	79	MPa	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
降伏點伸長率	50mm/min	3	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
斷裂伸長率	50mm/min	3	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, norm specimen.
抗彎強度	2mm/min, 10 N	121	MPa	DIN EN ISO 178	(2)
彈性模數 (彎曲測試)	2mm/min, 10 N	3900	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% 5mm/min, 10 N	15 / 34	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	53	kJ/m ²	DIN EN ISO 179-1eU	(5)
蕭氏硬度	D	81		DIN EN ISO 868	
熱特性	參數	值	單位	標準	註解
玻璃轉化溫度		45	°C	DIN EN ISO 11357	(1)
熔化溫度		221	°C	DIN EN ISO 11357	
使用溫度	short term	160	°C		(2)
使用溫度	long term	100	°C		
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) found in public sources
體積電阻	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω*cm	-	(2) based on raw material data
耐電痕(CTI)		600		DIN EN 60112	(2)
其他特性	參數	值	單位	標準	註解
耐熱水/鹼		(+)		-	(1) (+) limited resistance
耐候性		-		-	(2) - poor resistance
耐燃性(UL94)	raw material listed (value at 1.5mm)	V0		DIN IEC 60695-11-10;	(3) compliant, tested on 3 mm thick test specimen
耐燃性		R22 HL1 HL2, R23 HL3		EN 45545-2:2016	(4) compliant, tested on 4 mm thick test specimen
耐燃性	60 sec. Vertical Bunsen Burner test, 25.853 (a) and Appendix F, Part I, para. (a)(1)(i)	+		FAR 25.853	(5) compliant, tested on 4 mm thick test specimen
耐燃性	15 sec. Horizontal Bunsen Burner test, 25.853 (a) and Appendix F, Part I, para. (a)(1)(iv) and (v)	+		FAR 25.853	(6) compliant, tested on 4 mm thick test specimen
耐燃性	Heat Release, FAR Part 25, § 25.853 (d) and Appendix F, Part IV	+		FAR 25.853	(7) compliant, tested on 4 mm thick test specimen
耐燃性	Smoke density FAR Part 25, § 25.853 (d) and Appendix F, Part V	+		FAR 25.853	
耐燃性	Gas Toxicity, as per Airbus directive ABD 0031	+		AITM 3.0005	

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