

TECAFORM AH natural - 型材 (棒材, 板材, 管件)

化學命名

POM-C (聚縮醛 (共聚物))

顏色

白色 不透明

密度

1.41 g/cm³

主要特色

- 高強度
- 耐受清潔劑
- 剛性
- 高韌性
- 優異的電氣絕緣
- 良好的加工特性
- 良好的滑動及耐磨特性
- 難以黏合

目標產業

- 機械工程
- 汽車工業
- 航空與航太科技
- 電子學
- 食品科技
- 石油和天然氣工業

機械特性

參數	值	單位	標準	註解
抗拉強度	50mm/min	67	MPa	DIN EN ISO 527-2
彈性模數 (張力測試)	1mm/min	2800	MPa	DIN EN ISO 527-2 1)
降伏點抗拉強度	50mm/min	67	MPa	DIN EN ISO 527-2
降伏點伸長率	50mm/min	9	%	DIN EN ISO 527-2
斷裂伸長率	50mm/min	32	%	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	2600	MPa	DIN EN ISO 178
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	20/35/68	MPa	EN ISO 604 3)
壓縮模數	5mm/min, 10 N	2300	MPa	EN ISO 604 4)
衝擊強度(Charpy)	max. 7,5J	n.b.	kJ/m ²	DIN EN ISO 179-1eU 5)
缺口衝擊強度(Charpy)	max. 7,5J	8	kJ/m ²	DIN EN ISO 179-1eA
蕭氏硬度	D	82		DIN EN ISO 868

熱特性

參數	值	單位	標準	註解
玻璃轉化溫度	-60	°C	DIN EN ISO 11357	1)
熔化溫度	166	°C	DIN EN ISO 11357	
使用溫度	short term	140	°C	2)
使用溫度	long term	100	°C	
熱膨脹 (CLTE)	23-60°C, long.	13	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2
熱膨脹 (CLTE)	23-100°C, long.	14	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2
比熱	1.4	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 ¹³	Ω*cm	-
介電強度	23°C, 50% r.h.	49	kV/mm	ISO 60243-1 2)
耐電痕(CTI)	Platin electrode, 23°C, 50% r.h., solvent A	600	V	DIN EN 60112

其他特性

參數	值	單位	標準	註解
吸水率	24h / 96h (23°C)	0.05 / 0.1	%	DIN EN ISO 62 1)
耐熱水/鹼	(+)	-	-	2)
耐候性	-	-	-	3)
耐燃性(UL94)	corresponding to	HB	DIN IEC 60695-11-10; 4)	(1) Ø ca. 50mm, h=13mm (2) (+) limited resistance (3) - poor 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.

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