

TECAFORM AH black - 型材 (棒材, 板材, 管件)

化學命名

POM-C (聚縮醛 (共聚物))

顏色

黑色 不透明

密度

1.41 g/cm³

主要特色

- 高剛性
- 高強度
- 高韌性
- 良好的耐化學性
- 難以黏合
- 良好的滑動及耐磨特性
- 良好的加工特性

目標產業

- 機械工程
- 汽車工業
- 航空與航太科技
- 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	(1) For tensile test: specimen type 1b
彈性模數 (張力測試)	1mm/min	2800	MPa	DIN EN ISO 527-2	(2) For flexural test: support span 64mm, norm specimen.
降伏點抗拉強度	50mm/min	67	MPa	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
降伏點伸長率	50mm/min	9	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
斷裂伸長率	50mm/min	32	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, norm specimen.
抗彎強度	2mm/min, 10 N	91	MPa	DIN EN ISO 178	
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	150	kJ/m ²	DIN EN ISO 179-1eU	(5)
缺口衝擊強度(Charpy)	max. 7.5J	6	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	(2)
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 ¹⁴	Ω*cm	-	(2)
介電強度	23°C, 50% r.h.	38	kV/mm	ISO 60243-1	(3)
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;	

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