

TECAPRO MT black - 型材 (棒材, 板材, 管件)

化學命名

PP (聚丙烯)

顏色

黑色 不透明

密度

0.92 g/cm³

添加物

熱穩定性

主要特色

- 熱穩定性
- 生物相容性
- 良好的耐化學性
- 耐水解和熱蒸氣
- 低吸濕性
- 良好的滑動及耐磨特性

目標產業

- 醫療科技
- 食品科技
- 醫藥產業

機械特性	參數	值	單位	標準	註解
抗拉強度	50mm/min	37	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
彈性模數 (張力測試)	1mm/min	2000	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	37	MPa	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
降伏點伸長率	50mm/min	5	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
斷裂伸長率	50mm/min	34	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, norm specimen.
抗彎強度	2mm/min, 10 N	56	MPa	DIN EN ISO 178	(2) (6) Specimen in 4mm thickness
彈性模數 (彎曲測試)	2mm/min, 10 N	2000	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	16/26/49	MPa	EN ISO 604	(3)
壓縮模數	5mm/min, 10 N	1600	MPa	EN ISO 604	(4)
衝擊強度(Charpy)	max. 7,5J	160	kJ/m ²	DIN EN ISO 179-1eU	(5)
缺口衝擊強度(Charpy)	max. 7,5J	5	kJ/m ²	DIN EN ISO 179-1eA	
球壓式硬度		100	MPa	ISO 2039-1	(6)
熱特性	參數	值	單位	標準	註解
玻璃轉化溫度		-10	°C	DIN EN ISO 11357	(1) (1) Found in public sources.
熔化溫度		161	°C	DIN EN ISO 11357	(2) Found in public sources.
熱變形溫度	HDT, Method A	87	°C	ISO-R 75 Method A	Individual testing regarding application conditions is mandatory.
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	
電性特性	參數	值	單位	標準	註解
表面電阻		10 ¹²	Ω	-	(1) Due to the black colourant and moisture uptake of the material the electrical insulation properties cannot be 100% guaranteed, despite single measurements suggesting otherwise.
體積電阻		10 ¹⁴	Ω*cm	-	(1)
其他特性	參數	值	單位	標準	註解
吸水率	24h / 96h (23°C)	0.01 / 0.02	%	DIN EN ISO 62	(1) (1) Ø ca. 50mm, h=13mm (2) (+) limited 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		(+)	-	-	
耐燃性(UL94)	corresponding to	HB	-	DIN IEC 60695-11-10;	(3)

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