

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	(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	(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	
壓縮模數	5mm/min, 10 N	1600	MPa	EN ISO 604	
衝擊強度(Charpy)	max. 7.5J	160	kJ/m ²	DIN EN ISO 179-1eU	
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	
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) 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		
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	-	
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) Ø ca. 50mm, h=13mm
耐熱水/鹼		(+)		-	(2) (+) limited resistance
耐候性		(+)			(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.
耐燃性(UL94)	corresponding to	HB		DIN IEC 60695-11-10;	

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