

# TECAFORM AH ELS 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/cm<sup>3</sup>

## 添加物

黑色導電性碳

## 主要特色

- 導電性
- 高強度
- 難以黏合
- 良好的加工特性
- 良好的耐化學性
- 高韌性
- 良好的磨損性
- 良好的耐候和耐UV性

## 目標產業

- 化學技術
- 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	42	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
彈性模數 (張力測試)	1mm/min	1800	MPa	DIN EN ISO 527-2	1) (2) For flexural test: support span 64mm, nom specimen.
降伏點抗拉強度	50mm/min	42	MPa	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
降伏點伸長率	50mm/min	11	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
斷裂伸長率	50mm/min	11	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, nom 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	1500	MPa	DIN EN ISO 178	
壓縮強度	1% / 2% / 5% 5mm/min, 10 N	16/25/45	MPa	EN ISO 604	3)
壓縮模數	5mm/min, 10 N	1500	MPa	EN ISO 604	4)
衝擊強度(Charpy)	max. 7,5J	74	kJ/m <sup>2</sup>	DIN EN ISO 179-1eU	5)
球壓式硬度		96	MPa	ISO 2039-1	6)
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) (1) Found in public sources.
熔化溫度		169	°C	DIN EN ISO 11357	(2) Found in public sources. Individual testing regarding application conditions is mandatory.
使用溫度	short term	140	°C		2) (3) based on raw material data, specimen in 3mm thickness
使用溫度	long term	100	°C		
熱膨脹 (CLTE)	23-60°C, long.	13	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2	
熱膨脹 (CLTE)	23-100°C, long.	14	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2	
比熱		1.3	J/(g*K)	ISO 22007-4:2008	
導熱係數		0.46	W/(K*m)	ISO 22007-4:2008	
Relative temperature index (RTI)	Impact	90	°C	UL 746B	3)
電性特性	參數	值	單位	標準	註解
表面電阻	Conductive rubber, 23°C, 12% r.h.	10 <sup>2</sup> - 10 <sup>4</sup>	Ω	DIN EN 61340-2-3	1) (1) Specimen in 20 mm thickness
體積電阻	Conductive rubber, 23°C, 12% r.h.	10 <sup>3</sup> - 10 <sup>5</sup>	Ω*cm	DIN EN 61340-2-3	
其他特性	參數	值	單位	標準	註解
吸水率	24h / 96h (23°C)	0.05 / 0.2	%	DIN EN ISO 62	1) (1) Ø ca. 50mm, h=13mm
耐熱水鹼		(+)	-	-	2) (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;	3)

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