

TECAFORM AH TF10 blue - Stock Shapes (rods, plates, tubes)

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour

blue

Density

1.46 g/cm³

Fillers

10% PTFE

Main features

- resistant to cleaning agents
- high toughness
- very good electrical insulation
- good machinability
- good slide and wear properties
- difficult to bond

Target Industries

- mechanical engineering
- automotive industry
- electronics
- food technology

Mechanical properties	parameter	value	unit	norm	comment
Tensile strength	50mm/min	57	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
Modulus of elasticity (tensile test)	1mm/min	2900	MPa	DIN EN ISO 527-2	(2) For flexural test: support span 64mm, norm specimen.
Tensile strength at yield	50mm/min	57	MPa	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
Elongation at yield (tensile test)	50mm/min	11	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
Elongation at break (tensile test)	50mm/min	15	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, norm specimen.
Flexural strength	2mm/min, 10 N	82	MPa	DIN EN ISO 178	(6) Specimen in 4mm thickness
Modulus of elasticity (flexural test)	2mm/min, 10 N	2700	MPa	DIN EN ISO 178	
Compression strength	1% / 2% 5mm/min, 10 N	15 / 30	MPa	EN ISO 604	3)
Compression modulus	5mm/min, 10 N	2300	MPa	EN ISO 604	4)
Impact strength (Charpy)	max. 7,5J	56	kJ/m ²	DIN EN ISO 179-1eU	5)
Notched impact strength (Charpy)	max. 2J	4	kJ/m ²	DIN EN ISO 179-1eA	
Ball indentation hardness		141	MPa	ISO 2039-1	6)
Thermal properties	parameter	value	unit	norm	comment
Glass transition temperature		-60	°C	DIN EN ISO 11357	1)
Melting temperature		168	°C	DIN EN ISO 11357	
Service temperature	short term	140	°C		2)
Service temperature	long term	100	°C		
Electrical properties	parameter	value	unit	norm	comment
surface resistivity	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω	-	1)
volume resistivity	Silver electrode, 23°C, 12% r.h.	10 ¹³	Ω*cm	-	(1) Specimen in 20mm thickness
Other properties	parameter	value	unit	norm	comment
Water absorption	24h / 96h (23°C)	0.05 / 0.1	%	DIN EN ISO 62	1)
Resistance to hot water/ bases		(+)		-	2)
Resistance to weathering		-		-	3)
Flammability (UL94)	corresponding to	HB		DIN IEC 60695-11-10;	4)

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