

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

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour

blue opaque

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 | - | |
| 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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