

TECAFORM AH MT green - Stock Shapes

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour

green opaque

Density

1.41 g/cm³

Main features

- electrically insulating
- good chemical resistance
- high stiffness
- good machinability
- high toughness
- difficult to bond
- high strength

Target Industries

- medical technology
- food engineering
- pharmaceutical industry

| Mechanical properties | parameter | value | unit | norm | comment |
|---------------------------------------|--------------------------|--------------------|----------------------------------|----------------------|----------------|
| Modulus of elasticity (tensile test) | 1mm/min | 2800 | MPa | DIN EN ISO 527-2 | 1) |
| Tensile strength | 50mm/min | 69 | MPa | DIN EN ISO 527-2 | |
| Tensile strength at yield | 50mm/min | 70 | MPa | DIN EN ISO 527-2 | |
| Elongation at yield | 50mm/min | 15 | % | DIN EN ISO 527-2 | |
| Elongation at break | 50mm/min | 30 | % | DIN EN ISO 527-2 | |
| Flexural strength | 2mm/min, 10 N | 94 | MPa | DIN EN ISO 178 | 2) |
| Modulus of elasticity (flexural test) | 2mm/min, 10 N | 2800 | MPa | DIN EN ISO 178 | |
| Compression strength | 1% / 2% 5mm/min, 10 N | 18 / 32 | MPa | EN ISO 604 | 3) |
| Compression modulus | 5mm/min, 10 N | 2200 | MPa | EN ISO 604 | 4) |
| Impact strength (Charpy) | max. 7,5J | n.b. | kJ/m ² | DIN EN ISO 179-1eU | 5) |
| Notched impact strength (Charpy) | max. 7,5J | 9 | kJ/m ² | DIN EN ISO 179-1eA | |
| Ball indentation hardness | | 158 | MPa | ISO 2039-1 | 6) |
| Thermal properties | parameter | value | unit | norm | comment |
| Glass transition temperature | | -60 | °C | DIN 53765 | 1) |
| Melting temperature | | 169 | °C | DIN 53765 | |
| Service temperature | short term | 140 | °C | | 2) |
| Service temperature | long term | 100 | °C | | |
| Thermal expansion (CLTE) | 23-60°C, long. | 13 | 10 ⁻⁵ K ⁻¹ | DIN EN ISO 11359-1;2 | |
| Thermal expansion (CLTE) | 23-100°C, long. | 14 | 10 ⁻⁵ K ⁻¹ | DIN EN ISO 11359-1;2 | |
| Specific heat | | 1.4 | J/(g*K) | ISO 22007-4:2008 | |
| Thermal conductivity | | 0.39 | W/(K*m) | ISO 22007-4:2008 | |
| Electrical properties | parameter | value | unit | norm | comment |
| Specific surface resistance | | > 10 ¹² | Ω | DIN IEC 60093 | |
| 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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