

Celcon® M-25 green (TECAFORM® AH MT) - Stock Shapes (rods, plates, tubes)

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour

green

Density

1.41 g/cm³

Main features

- meets requirements for USP Class VI
- compliant with cytotoxicity according to ISO 10993-5
- good machinability

Target Industries

- medical technology
- pharmaceutical industry

| Mechanical properties | condition | value | unit | test method | comment |
|---------------------------------------|----------------------|----------------------|-----------|---------------|--|
| Modulus of elasticity (tensile test) | | 390,000 | psi | ASTM D 638 | (1) Data obtained from public source |
| Tensile strength at yield | | 9,400 | psi | ASTM D 638 | |
| Tensile strength at break | @ 73 °F | 10,000 | psi | ASTM D 638 | 1) |
| Elongation at yield (tensile test) | | 10 | % | ASTM D 638 | |
| Elongation at break (tensile test) | | 28 | % | ASTM D 638 | |
| Flexural strength | | 13,400 | psi | ASTM D 790 | |
| Modulus of elasticity (flexural test) | | 411,000 | psi | ASTM D 790 | |
| Compression strength | @ 73 °F, 1% strain | 2,900 | psi | ASTM D 695 | |
| Compression strength | @ 73 °F, 10% strain | 13,500 | psi | ASTM D 695 | |
| Compression modulus | @ 73 °F | 273,600 | psi | ASTM D 695 | |
| Impact strength (Izod) | @ 73 °F | .85 | ft-lbs/in | ASTM D 256 | |
| Thermal properties | condition | value | unit | test method | comment |
| Melting temperature | | 320 | °F | - | 1) (1) per ASTM D3418 |
| Deflection temperature | @264 psi | 230 | °F | ASTM D 648 | 2) (2) Data obtained from public source |
| Service temperature | Long Term | 212 | °F | - | 3) (3) Data obtained from public source |
| Service temperature | short term | 284 | °F | - | 3) (4) data obtained from public source |
| Thermal expansion (CLTE) | @ 73°F to 131°F | 5.5*10 ⁻⁵ | in/in/°F | ASTM E 831 | 4) |
| Electrical properties | condition | value | unit | test method | comment |
| surface resistivity | | 10 ¹⁴ | Ω/square | DIN IEC 60093 | 1) (1) data obtained from public sources |
| volume resistance | | 10 ¹⁴ | Ω*cm | DIN IEC 60093 | 2) (2) data obtained from public sources |
| Dielectric loss factor | | 0.003 | | DIN IEC 60250 | 3) (3) data obtained from public sources |
| Dielectric constant | @ 10 ³ Hz | 3.5 | | DIN IEC 60250 | 4) (4) data obtained from public sources |
| Other properties | condition | value | unit | test method | comment |
| Moisture absorption | @ 24 hrs. | 0.12 | % | ASTM D 570 | |

→ Resin specification:
ASTM D6778-14 POM0210B55340
Shapes specification:
ASTM D6100-11 S-POM0211

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended. Data is obtained from extruded shapes material unless otherwise noted. References to FDA compliance refer to the resins from which the products were made unless otherwise noted. All trade and patent rights should be observed. All rights reserved. Data sheet values are subject to periodic review, the most recent update can be found at www.ensingerplastics.com.

Ensinger Inc. Headquarters
365 Meadowlands Boulevard
Washington, PA 15301, USA

Phone 800-243-3221 Sales
Phone 800-869-4029 Technical
Fax 724-746-9209
sales@ensingerusa.com

Date: 2017/08/07

Version: A0