

TECAFORM® AH natural - Stock Shapes (rods, plates, tubes)

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour white

Density 1.41 g/cm³

Main features

- → good wear properties
- → low water absorption
- → good chemical resistance
- → easy to machine
- → high dimensional stability

Target Industries

- → food technology
- → food processing
- → agricultural machinery
- → construction industry
- → conveyor technology
- → automotive industry
- → gear manufacturing
- → packaging and paper machinery
- → heavy duty industry
- → process engineering

| Mechanical properties | condition | value | | test method | | comment | |
|------------------------------------------------------------|---------------------------|------------------------|-----------------|---------------|----------------------------------------|-------------------------------------------------------------------|--|
| Modulus of elasticity @ 73 °F 330,000 psi lensile test) | | | | ASTM D 638 | | (1) Data obtained from public source (2) Data obtained from | |
| Tensile strength at yield | @ 73 °F | 9,300 | psi | ASTM D 638 | | public source | |
| Tensile strength at break | @ 73 °F | 9,700 | psi | ASTM D 638 | 1) | | |
| Elongation at yield | @ 73 °F | 9 | % | ASTM D 638 | 2) | | |
| Elongation at break | @ 73 °F | 40 | % | ASTM D 638 | | | |
| Flexural strength | @ 73 °F | 13,000 | psi | ASTM D 790 | | | |
| Modulus of elasticity (flexural test) | @ 73 °F | 400,000 | psi | ASTM D 790 | <u>-</u> | | |
| Compression strength | @ 73 °F, 1% strain | 2,500 | psi | ASTM D 695 | | | |
| Compression strength | @ 73 °F, 10% strain | 12,000 | psi | ASTM D 695 | | | |
| Compression strength | @ 73 °F, 5 % strain | 4,500 | °F | ASTM D 695 | | | |
| Compression modulus | @ 73°F | 250,000 | psi | ASTM D 695 | | | |
| Impact strength (Izod) | @ 73 °F | 1.0 | ft-lbs/in | - | | | |
| Rockwell hardness | @ 73 °F, R scale | 120 | | ASTM D 785 | | | |
| Rockwell hardness | @ 73 °F M Scale | 86 | | ASTM D 785 | _ | | |
| Coefficient of friction | Dynamic 40 psi, 50 fpm | .21 | | ASTM D 3702 | | | |
| Wear (K) factor | 40 psi, 50 fpm | 65 x 10 ⁻¹⁰ | in³-min/ft-lbs- | -hr ASTMD3702 | | | |
| Thermal properties | condition | value | | test method | | comment | |
| Melting temperature | | 329 | °F | - | | (1) per UL746B | |
| Deflection temperature | @ 66 psi | 316 | °F | ASTM D 648 | | | |
| Deflection temperature | @264 psi | 230 | °F | ASTM D 648 | ······ | | |
| Service temperature | Intermittent | 285 | °F | - | | | |
| Service temperature | Long Term | 195 | °F | - | 1) | | |
| Thermal expansion (CLTE) | | 4.7*10 ⁻⁵ | in/in/°F | ASTM D 696 | ······································ | | |
| Electrical properties | condition | value | | test method | | comment | |
| Volume resistivity | | 1.0 x 10 ¹⁴ | Ω*cm | ASTM D 257 | 1) | (1) Data obtained from public | |
| Dielectric strength | | 500 | V/mil | ASTM D 149 | 2) | source (2) Data obtained from public | |
| Dissipation factor | @ 60 Hz, 73 °F | .001 | % | ASTM D 150 | 3) | source (3) Data obtained from public | |
| Dielectric constant | @ 60 Hz, 73 °F, 50% RH | 3.7 | % | ASTM D 150 | 4) | source (4) Data obtained from public source | |
| Other properties | condition | value | | test method | | comment | |
| Moisture absorption | @ saturation, 73 °F | .80 | % | ASTM D 570 | | (1) at 1.5mm thickness | |
| Moisture absorption | @ 24 hrs, 73 °F | 0.18 | % | ASTM D 570 | | injection molded sample | |
| Flammability (UL94) | UL 94 | НВ | % | - | 1) | | |

[→] Resin specification: ASTM D6778-06 POM0211 superseding ASTM D4181-00 POM211 Shapes specification: ASTM D6100-11 S-POM211

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.

365 Meadow lands Boulevard Washington, PA 15301, USA Phone 800-869-4029 Technical Fax 724-746-9209 sales@ensinger-ind.com

More info about Acetal More info about PROP 65



Industrial Plastic Supply 2240 S. Dupont Drive Anaheim, CA 92806 (866-832-9315) www.iplasticsupply.com