



### VINPOL™ PO3406

Acetal (POM) Homopolymer

Melt Flow Rate: 34

Charpy Notched Impact: 6

**VINPOL PO3406** is an Acetal (POM) homopolymer with fast molding cycle performance and high flow/low viscosity. This resin produces parts with low warpage. Typical applications include engineering parts, gears and housings. Automotive specifications include BOSCH 5515265 and DAIMLER DBL 5403.

| Resin Property                         | Typical Value | Units             | Test Method          |
|----------------------------------------|---------------|-------------------|----------------------|
| Melt Flow, 190°C, 2.16 kg              | 34            | g/10 min          | ISO 1133             |
| Density                                | 1.42          | g/cm <sup>3</sup> | ASTM D-792           |
| Mold Shrinkage, Flow                   | 1.7-2.1       | %                 | Supplier Method      |
| Water Absorption (24 hr, 23°C, 50% RH) | 0.20          | %                 | ASTM D570            |
| Tensile Modulus                        | 3,400         | MPa               | ISO 527-1            |
| Tensile Stress at Yield                | 73            | MPa               | ISO 527-2            |
| Tensile Stress at Break                | 75            | MPa               | ASTM D-638           |
| Tensile Elongation at Break            | 20            | %                 | ISO 527-2/ASTM D-638 |
| Flexural Modulus                       | 3,200         | MPa               | ISO 178/ASTM D-790   |
| Flexural Strength                      | 111           | MPa               | ASTM D-790           |
| Taber Abrasion Resistance              | 13.0          | mg                | ASTM D-1044          |
| Charpy Notched Impact Strength         | 6.0           | kJ/m <sup>2</sup> | ISO 179              |
| Notched Izod Impact                    | 56            | J/m               | ASTM D-256           |
| Rockwell Hardness                      | 94            | M Scale           | ASTM D-785           |
| Rockwell Hardness                      | 120           | R Scale           | ASTM D-785           |
| DTUL, 0.45 MPa, Unannealed             | 165           | °C                | ISO 75-2/B           |
| DTUL, 0.45 MPa, Unannealed             | 172           | °C                | ASTM D-648           |
| DTUL, 1.8 MPa, Unannealed              | 105           | °C                | ISO 75-2/A           |
| DTUL, 1.8 MPa, Unannealed              | 136           | °C                | ASTM D-648           |
| CLTE, Flow                             | 1.0E-4        | cm/cm/°C          | ISO 11359/ASTM D696  |
| Specific Heat                          | 1,470         | J/kg/°C           | Supplier Method      |
| Thermal Conductivity                   | 0.23          | W/m/K             | Supplier Method      |
| Flame Rating, 0.75 mm                  | HB            | -                 | UL 94                |
| Flame Rating, 1.5 mm                   | HB            | -                 | UL 94                |

Vinmar Polymers America cannot anticipate or control the many different conditions under which this information and/or product may be used. It does not guarantee the applicability or the accuracy of this information or the suitability of its products in any given situation. User of the material should make their own tests to determine the suitability of each such product for their particular purposes. The data listed herein falls within the normal range of product properties, but they should not be used to establish specification limits or used alone as the basis of design.

Vinmar Polymers America, LLC / 16825 Northchase Drive, Suite 1400, Houston, TX 77060  
Phone: 281-902-0900 Fax: 281-260-8096

Rev. Date 7/29/2021

