

POM-C, also known as acetal or polyoxymethylene, is a thermoplastic polymer with excellent mechanical properties. It offers high stiffness, low friction, good wear resistance, and dimensional stability. POM-C is commonly used in applications where low friction, high strength, and precise tolerances are required, such as gears, bearings, bushings, and mechanical components.

**Chemical Description**

| Description   | Value                                 |
|---------------|---------------------------------------|
| Material Type | Semi-Crystalline Thermoplastic        |
| Chemical Name | POM Polyoxymethylene Acetal Copolymer |
| Additives     | Unfilled                              |
| Color         | White                                 |
| UV Resistant  | No                                    |

**Physical Properties**

| Property  | Maximum Unless Range is Specified |
|---|-----------------------------------|
| Density,lbs/in <sup>3</sup>                               | 0.051                             |
| Water Absorption, 24 hrs, Immersion,% by wt.              | 0.2                               |
| Coefficient of Linear Thermal Expansion, x10-5 in./in./°F | 5.4                               |
| Heat Deflection Temp,°F at 263psi                         | 220                               |
| Melting Point Temp,°F                                     | 335                               |
| Max Continuous Operating Temp,°F                          | 180                               |
| Minimum Operating Temp,°F                                 | -58                               |
| Flammability Rating,UL94                                  | HB                                |
| Dielectric Strength,V/mil                                 | 420                               |
| Dielectric Constant at 1 MHz                              | 3.8                               |
| Thermal Conductivity,BTU-in/ft <sup>2</sup> -hr-°F        | 1.6                               |

**Mechanical Properties**

| Property                              | Maximum Unless Range is Specified |
|---------------------------------------|-----------------------------------|
| Tensile Strength,ksi                  | 9.5                               |
| Tensile Modulus,ksi                   | 400                               |
| Compressive Strength,ksi              | 15                                |
| Compressive Modulus,ksi               | 400                               |
| Flexural Strength,ksi                 | 12                                |
| Flexural Modulus,ksi                  | 400                               |
| Elongation at Break                   | 30%                               |
| Hardness Rockwell                     | M88/R120                          |
| Notched Izod Impact Strength,ft-lb/in | 1                                 |

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.