



VERTEC 1055 is mica filled PTFE (polytetrafluorethylene) material. It exhibits very low coefficient of friction and low wear rate under dry running conditions. It is an ideal non-abrasive sealing material against soft metal surfaces in dynamic applications. Compared with other filled PTFE materials, it exhibits excellent sealability at high temperatures. It offers excellent dimensional stability, unparalleled chemical resistance and continuous use temperature of 500 oF.

| Physical Properties | ASTM Method | Typical Values |
|-------------------------------------|-------------|-------------------------|
| Specific Gravity | D792 | 2.21 gr/cm ³ |
| Water Absorption (24 hrs. @73.4° F) | D570 | 0.1 % |
| Color | N/A | Off White |

| Mechanical Properties | ASTM Method | Typical Values |
|---------------------------------|-------------|----------------|
| Tensile Strength | D1708 | 2200 psi |
| Tensile Elongation | D1708 | 250.0 % |
| Flexural Strength | D790 | 1800 psi |
| Flexural Modulus | D790 | 250000 psi |
| Compressive Strength | D695 | 3000 psi |
| Compressive Modulus | D695 | 125000 psi |
| Impact Strength (Izod, notched) | D256 | ft-lb/in |
| Hardness | Shore D | 61 |

| Tribological Properties | ASTM Method | Typical Values |
|-----------------------------------|-------------|----------------|
| Coefficient of Friction - Static | D3702 | 0.25 |
| Coefficient of Friction - Dynamic | D3702 | 0.2 |

| Thermal Properties | ASTM Method | Typical Values |
|---|-------------|----------------|
| Coefficient of Linear Thermal Expansion (78-400° F) | D696 | 112 10 -6/° F |
| Heat Deflection Temperature (@264 psi) | D648 | 210 ° F |
| Glass Transition Temperature (Tg) | D3418 | 266 ° F |
| Continuous Service Temperature (Max @ no load) | | 500 ° F |
| Melting Point | | 621 ° F |

| Electrical Properties | ASTM Method | Typical Values |
|-----------------------|-------------|-------------------------|
| Volume Resistivity | D257 | 10 ¹⁶ ohm-cm |
| Dielectric Strength | D149 | 200 KV/mm |
| Dielectric Constant | D150 | 2.68 Hz, 200° C |