



## GEHR

### PRODUCT CAPABILITIES:

- Rod : 10 - 80mm
- Sheet : 10 - 40mm

### ADVANTAGES:

- Very high mechanical strength
- Very high rigidity
- Very high thermal stability
- Very high creep resistance
- Very high dimensional stability
- Very high radiation resistance
- Very high hydrolysis resistance
- Relatively low notch impact strength
- Low resistance to acetone

### PRODUCT COLORS:

- Black

### APPLICATIONS INCLUDE:

- Locking devices
- Spacers
- Dosing systems
- Nozzles, flanges, grippers
- Housing parts in the electrical industry
- Fixtures, bevel gears

| GENERAL PROPERTIES                                 | ASTM or UL Test | PEEK Mod Typical Values |
|--|-----------------|-------------------------|
| <b>PHYSICAL</b>                                    |                 |                         |
| Specific Gravity (g/cm <sup>3</sup> )              | D792            | 1.48                    |
| Water Absorption, 24 hrs (%)                       | D570            | 0.3                     |
| <b>MECHANICAL</b>                                  |                 |                         |
| Tensile Strength (psi)                             | D638            | 12,325                  |
| Tensile Elongation at Break (%)                    | D638            | 7                       |
| Flexural Strength (psi)                            | D638            | 30,000                  |
| Flexural Modulus (psi)                             | D638            | 1,394,000               |
| Compressive Strength (psi)                         | D695            | -                       |
| Compressive Modulus (psi)                          | D695            | -                       |
| Hardness, Shore D                                  | D2240           | 85                      |
| IZOD Notched Impact (ft-lb/in)                     | D256            | 3.2                     |
| <b>THERMAL</b>                                     |                 |                         |
| Coeff. of Thermal Expansion, Flow (1/°F)           | D696            | 1.7 x 10 <sup>-5</sup>  |
| Heat Deflection Temp (°F / °C) @ 66 psi            | D648            | -                       |
| Heat Deflection Temp (°F / °C) @ 264 psi           | D648            | 622 / 328               |
| Vicat Softening Temperature, Rate B/50 (°C)        | -               | -                       |
| Oxygen Index (LOI) (%)                             | -               | -                       |
| Flammability Rating                                | -               | V-0                     |
| <b>ELECTRICAL</b>                                  |                 |                         |
| Dielectric Strength (V/mil) short time, 1/8" thick | D149            | -                       |
| Dielectric Constant at 1 MHz                       | D150            | -                       |
| Volume Resistivity (ohm.cm)                        | D257            | 10 <sup>10</sup>        |
| Surface Resistivity (ohm)                          | -               | 10 <sup>5</sup>         |

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.