## Pyramid KD2450-NT (PEEK)

PEEK with 30\% Ceramic Filler

| General | ASTM \# | US Value | SI Unit |
| :---: | :---: | :---: | :---: |
| Form | --- | Pellets |  |
| Composition | --- | Ceramic filled PEEK |  |
| Filler Content, \% | --- | 30 |  |
| Density, lb/in ${ }^{3}$ | D792 | 0.054 | $1.5 \mathrm{~g} / \mathrm{ml}$ |
| Mechanical |  |  |  |
| Tensile Strength (Break), Kpsi | D638 | 11.5 | 80 MPa |
| Tensile Modulus, Mpsi | D638 | 0.6 | 4.4 GPa |
| Elongation (Break),\% | D638 | >10 \% |  |
| Flexural Strength (Yield) Kpsi | D790 | 22 | 155 MPa |
| Flexural Modulus Mpsi | D790 | 0.6 | 4.4 GPa |
| Izod, Notched, ft-lb/in @1/8" | D256 | 1 | $53 \mathrm{~J} / \mathrm{cm}$ |
| Thermal |  |  |  |
| Melting Point, ${ }^{\circ} \mathrm{F}$ | DSC | 645 | $341^{\circ} \mathrm{C}$ |
| Tg (Glass Transition), ${ }^{\circ} \mathrm{F}$ | DSC | 290 | $143^{\circ} \mathrm{C}$ |
| Flammability Rating (UL 94) | UL 94 |  |  |
| HDT@ $66 \mathrm{psi},{ }^{\circ} \mathrm{F}$ | D648 | > 500 | $>260^{\circ} \mathrm{C}$ |
| CTE, linear $\mu \mathrm{in} / \mathrm{in}-{ }^{\circ} \mathrm{F}(<\mathrm{Tg})$ | D696 | $2 \times 10^{-5}$ | $3.6 \times 10^{-5}$ $\mu \mathrm{m} / \mathrm{m}-{ }^{\circ} \mathrm{C}$ |
| Electrical |  |  |  |
| Dielectrical Strength, V/mil | D149 | 400 | $15 \mathrm{KV} / \mathrm{mm}$ |
| Dissipation Factor @ 1 MHz | D150 | 0.005 |  |
| Volume Resistivity, Ohm-cm $\times 10^{15}$ | D257 | 1.0 |  |
| Surface Resistivity, Ohm/sq $\times 10^{13}$ | D257 | 1.0 |  |

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Polymics • 2215 High Tech Rd. • State College • PA 16803 USA • TEL: (814) 357-5860 1006 Guangfu Rd. • Bade City • Taoyuan 33455 Taiwan • TEL: 886 (3) 339-8000

