

Technical Data Sheet PAA 4000 (Dry)

PAA 4000 is a 40% reinforced aromatic nylon copolymer. It has very high stiffness and strength similar to PPA. It can be processed in water heated tools and provides excellent surface finish. It is commonly used in metal and die cast replacement applications.

| Mechanical | ASTM | English | Metric |
|------------------------------------|--------|---------------------------------------|--|
| Tensile Strength at Yield | D 638 | 32,000 psi. | 220 Mpa |
| Elongation at Fail | D 638 | 3% | 3% |
| Elongation at Yield | D 638 | 3% | 3% |
| Flexural Modulus | D 790 | 1,600,000 psi. | 11,000 Mpa |
| Flexural Strength | D 790 | 49,000 psi. | 337 Mpa |
| Izod Impact Strength, Notched | D 256 | 2.5 ft-lb/in | |
| Izod Impact Strength, Unnotched | D 256 | | |
| | | | |
| Thermal | | | |
| Vicat Softening Temp | D1525 | 480 °F | 248 °C |
| Deflection Temperature@ 66psi | D 648 | 470 °F | 243 °C |
| Deflection Temperature @ 264psi | D 648 | 455 °F | 235 °C |
| Coefficient of Thermal Expansion | D 696 | $0.8 \times 10^{-5} / ^\circ\text{F}$ | $0.45 \times 10^{-5} / ^\circ\text{C}$ |
| | | | |
| Misc. | | | |
| Specific Gravity | D 792 | 1.48 | 1.48 |
| Water Absorption (24hr.) | D 570 | 0.55% | 0.55% |
| | | | |
| Melt Flow Rate, 337C/6.6 kgf | D 1238 | . | |
| Mold Shrinkage, flow, 125-180 mil | D 955 | 0.20 % | 0.20 % |
| Mold Shrinkage, xflow, 125-180 mil | D 955 | 0.95% | 0.95% |

The data listed above are typical properties, and as such are dependent on processing conditions. No warranties, expressed or implied, including patent warranties, or warranties of merchantability or fitness for use, are made with respect to the product information.

