

Vero | POLYJET RIGID OPAQUE PHOTOPOLYMER

Vero™ Rigid Opaque photopolymers provide excellent detail visualization in black, white, cyan, yellow and magenta. Custom blends enables the Connex3 system to create hundreds of digital colors, blended right in the 3D printer. You can incorporate as many as 46 vibrant, repeatable rigid colors into one 3D model for unprecedented design freedom. These color materials also blend with VeroClear Transparent photopolymer for beautiful translucent color, and with Rubber-like materials for a range of hues and hardnesses. You can 3D print accurate, attractive prototypes that test fit, form and function, even for moving and assembled parts.

| MECHANICAL PROPERTIES | TEST METHOD | IMPERIAL | METRIC |
|-----------------------|-------------|--------------------------|-------------------|
| Tensile Strength | D-638-03 | 7,250 - 9,450 psi | 50 - 65 MPa |
| Elongation at Break | D-638-05 | 10 - 25% | 10 - 25% |
| Modulus of Elasticity | D-638-04 | 290,000 - 435,000 psi | 2,000 - 3,000 MPa |
| Flexural Strength | D-790-03 | 11,000 - 16,000 psi | 75 - 110 MPa |
| Flexural Modulus | D-790-04 | 320,000 - 465,000 psi | 2,200 - 3,200 MPa |
| Izod Notched Impact | D-256-06 | 0.375 - 0.562 ft lb/inch | 20 - 30 J/m |

| THERMAL PROPERTIES | TEST METHOD | IMPERIAL | METRIC |
|----------------------------------|-------------|--------------|------------|
| Heat Deflection (HDT) @ 0.45 MPa | D-648-06 | 113 - 122 °F | 45 - 50 °C |
| Heat Deflection (HDT) @ 1.82 MPa | D-648-07 | 113 - 122 °F | 45 - 50 °C |
| Glass Transition (Tg) | DMA, E | 126 - 129 °F | 52 - 54 °C |

| OTHER | TEST METHOD | IMPERIAL | METRIC |
|---------------------|---------------|-----------------|------------------------------|
| Shore Hardness | Scale D | 83 - 86 Scale D | 83 - 86 Scale D |
| Rockwell Hardness | Scale M | 73 - 76 Scale M | 73 - 76 Scale M |
| Polymerized Density | ASTM D792 | - | 1.17- 1.18 g/cm ³ |
| Ash Content | USP 281 | 0.23 - 0.26 % | 0.23 - 0.26 % |
| Water Absorption | D-570-98 24hr | 1.1 - 1.5% | 1.1 - 1.5% |

