

Vesconite - Typical Properties

| | | METRIC | IMPERIAL |
|---|------------------------------|-----------------------------|---------------------------------|
| Density (Specific Gravity) | | 1.38 | |
| Melting point | | 260°C | 500°F |
| Hardness - Shore D (ASTM D2240) | | 83 | |
| Compressive Properties (ASTM D695 - 15) | Compressive Strength @ Yield | 93 MPa | 13,489 psi |
| | Modulus of Elasticity | 2.3 GPa | 333,590 psi |
| Tensile Properties (ASTM D695 - 15) | Tensile Strength @ Yield | 66 MPa | 9,573 psi |
| | Tensile Strength @ Break | 63 MPa | 9,137 psi |
| Tangent modulus of elasticity (ASTM D-790) | | 3,726 MPa | 540,410 psi |
| Water swell - Mass change (ASTM D570) | After 24 hours | 0.11% | |
| | After 28 days | 0.12% | |
| Oil swell - Mass change (ASTM D570) | After 24 hours | 0.08% | |
| | After 28 days | 0.09% | |
| Shear strength (ASTM D732 -17) | | 49.1MPa | 7,121 psi |
| Flexural yield strength | | 120 MPa | 17,400 psi |
| Deflection temperature at 1.85MPa / 268 psi | | 93°C | 200°F |
| Notched impact strength - Charpy (ISO 179) | | 245 kJ/m ² | 117 ft-lb/in ² |
| Notched impact strength IZOD | | 30 J/m | 0.56 ft-lb/in |
| Heat conductivity | | 0.3 w/m.K | 2 Btu-in/ft ² .hr.°F |
| Coefficient of linear thermal expansion | | 6x10 ⁻⁵ mm/mm.°C | 3.3x10 ⁻⁵ in/in.°F |
| Dynamic friction coefficient on polished steel (no lubrication) | | 0.13 - 0.18 | |
| Dielectric strength | | 14 kV/mm | 360 kV/in |
| Gamma ray resistance 50% loss of properties | | 100 Mrads | |

The above data should be taken for indicative purposes. Physical properties may be altered to some extent by processing conditions.