

MDPE PE 2708 Technical Data Chart

| Nominal MDPE Pipe Property ¹ | ASTM Test Method | Unit | Required by ASTM D2513 for PE2708 | Typical Value |
|---|------------------|-------------------------|-----------------------------------|-------------------------|
| Cell Classification | D3350 | - | PE 234373E | PE 234373E |
| Density w/ Min 2% Carbon Black | D1505 | g/cm ³ | > 0.925 - 0.940 | 0.939 |
| Melt Flow Index (190/2.16) | D1238 | g/10 min | < 0.40 - 0.15 | 0.18 |
| Hydrostatic Design Basis (HDB) @ 73°F (23°C) | D2837 | psi | 1,600 | 1,250 |
| Hydrostatic Design Stress (HDB) @ 140°F (60°C) | D2837 | psi | 1,000 | 800 |
| Color: UV Stabilizer [E] | D3350 | - | - | Yellow |
| Nominal MDPE Material Property² | | | | |
| Nominal MDPE Material Property ² | ASTM Test Method | Unit | Required by ASTM D2513 for PE2708 | Typical Value |
| Tensile Strength at Yield | D638 | psi | 2,600 - < 3,000 | 2,800 |
| Tensile Elongation at Break | D638 | % | - | 800 |
| Slow Crack Growth (PENT) | F1473 | hrs | > 500 | > 2,000 |
| Flexural Modulus | D790 | psi | 80,000 - < 110,000 | > 90,000 |
| Modulus of Elasticity (Short Term ³) | D638 | psi | - | 100,000 |
| Vicant Temperature | D1525 | °F | - | 227 |
| Brittleness Temperature | D746 | °F | - | < -103 |
| Hardness | D2240 | - | - | 63 |
| Coefficient of Thermal Expansion/Contraction | D696 | in/in ·°F | - | 10.0 x 10 ⁻⁵ |
| Compressive Stress | - | psi | - | 800 |
| Thermal Conductivity | - | BTU ·in /hr ·sq. ft ·°F | - | 2.6 |
| Poisson's Ratio | - | - | - | 0.45 |

¹The nominal pipe properties were determined on pipe extruded from a pellet blend of typical resin and an approved color concentrate. ²The nominal properties reported are typical of the resin when blended with an approved color concentrate, except the density value which is representative of the natural resin, but do not reflect normal testing variance and therefore should not be used for specification purposes. Values are rounded. ³Ratio of stress to strain that that is achieved at a certain defined strain. This apparent modulus is considered "short term" and is of limited value for engineering design.