

Product Texts

M5005L is a Narrow MWD HDPE produced by the Spherilene Technology.

M5005L is recommended for injection molding of heavy duty Crates, Industrial products and for injection molded as well as extrusion compression molded caps for packaged drinking water.

The precise control of morphology & MWD during polymerization confers superior processability and improved performance properties compared to conventional HDPE grades.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|--------------|-------------|----------------------|
| ASTM Data | | | |
| Melt Flow Index, MFI | 4.5 | g/10min | ASTM D 1238 |
| Temperature | 190 | °C | - |
| Load | 2.16 | kg | - |

| Mechanical properties | Value | Unit | Test Standard |
|------------------------------|--------------|-------------|----------------------|
| ASTM Data | | | |
| Tensile Strength at Yield | 22 | MPa | ASTM D 638 |
| Tensile Strength at Break | 31 | MPa | ASTM D 638 |
| Elongation at Break | 900 | % | ASTM D 638 |
| Flexural Modulus | 850 | MPa | ASTM D 790 |
| Shore D Hardness | 62 | - | ASTM D 2240 |
| Izod Impact notched, 1/8 in | 100 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|---------------------------|--------------|-------------|----------------------|
| ASTM Data | | | |
| DTUL @ 66 psi | 64 | °C | ASTM D 648 |
| Melting Temperature | 132 | °C | ASTM D 3418 |
| Vicat Temperature | 124 | °C | ASTM D 1525 |

| Other properties | Value | Unit | Test Standard |
|-------------------------|--------------|-------------------|----------------------|
| Density | 950 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|------------------|-------------|----------------------|
| Zone 1 | 185 - 235 | °C | - |
| Nozzle temperature | 235 | °C | - |

Characteristics

Processing

Injection Molding, Other Extrusion

Applications

Packaging

Certifications

Drinking water contact

Regional Availability

Asia Pacific