



## VINPOL™ LD002519AE

### Low Density Polyethylene

Melt Index: 0.25

Density: 0.919

**VINPOL LD002519AE** is a low density polyethylene, fractional melt blown film resin suitable for heavy duty film requiring high strength and processability. This grade contains 4000 ppm of antiblock additive. Typical applications include agricultural film, construction film, zipper bag film, collation shrink film, pallet shrink film, and for use as a blend partner. This product meets all requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles intended for direct food contact.

| *Resin Property                   | Typical Value              | Units             | Test Method     |
|-----------------------------------|----------------------------|-------------------|-----------------|
| Melt Index, 2.16 Kg at 190 °C     | 0.25                       | g/10 min          | ASTM D-1238     |
| Density                           | 0.919                      | g/cm <sup>3</sup> | ASTM D-1505     |
| Peak Melting Temperature          | 230 (110)                  | °F (°C)           | Supplier Method |
| Vicat Softening Temperature       | 194 (90)                   | °F (°C)           | Supplier Method |
| Tensile Strength at Yield (MD/TD) | 1,600 (11)/1,500 (10)      | psi (MPa)         | ASTM D-882      |
| Tensile Strength at Break (MD/TD) | 3,600 (25)/3,100 (21)      | psi (MPa)         | ASTM D-882      |
| Elongation at Break (MD/TD)       | 100/540                    | %                 | ASTM D-882      |
| Secant Modulus (MD/TD)            | 26,000 (180) /35,000 (240) | psi (MPa)         | ASTM D-882      |
| Elmendorf Tear Strength (MD/TD)   | 340/120                    | g                 | ASTM D-1922     |
| Dart Drop Impact                  | 180                        | g                 | ASTM D-1709A    |
| Puncture Force                    | 12 (52)                    | lbf (N)           | Supplier Method |
| Puncture Energy                   | 6.2 (0.70)                 | in-lb (J)         | Supplier Method |
| Gloss, 45°                        | 35                         | -                 | ASTM D-2457     |
| Haze                              | 20                         | %                 | ASTM D-1003     |

\*Film properties measured on 2.0 mil (50.8 micron) film made on a 2.5 in (63.5 mm) blown film line with a 2.5:1 BUR, a melt temperature of 360-380°F (182-193°C), a 30 mil (0.76mm) die gap at a rate of 8 lbs/hr/in die circumference (1.43 kg/hr/cm).

Vinmar Polymers America cannot anticipate or control the many different conditions under which this information and/or product may be used. It does not guarantee the applicability or the accuracy of this information or the suitability of its products in any given situation. User of the material should make their own tests to determine the suitability of each such product for their particular purposes. The data listed herein falls within the normal range of product properties, but they should not be used to establish specification limits or used alone as the basis of design.