

# ExxonMobil™ LDPE LD 637.LI

## Low Density Polyethylene Resin

### Product Description

ExxonMobil™ LD 637.LI is a high melt index LDPE homopolymer resin intended for injection molding or compounding applications requiring high flow. It is ideal for tamper-evident, tear-to-open closures. It can also be used in compounds and concentrates.

### General

|              |                      |                                      |                                                  |
|--------------|----------------------|--------------------------------------|--------------------------------------------------|
| Additive     | ▪ Antiblock: No      | ▪ Slip: 550 ppm                      | ▪ Thermal Stabilizer: No                         |
| Applications | ▪ Caps<br>▪ Closures | ▪ Compounding<br>▪ Injection Molding | ▪ Masterbatch Base Resin<br>▪ Viscosity Modifier |
| Form(s)      | ▪ Pellets            |                                      |                                                  |

| Resin Properties           | Typical Value (English) | Typical Value (SI)      | Test Based On     |
|----------------------------|-------------------------|-------------------------|-------------------|
| Density                    | 0.922 g/cm <sup>3</sup> | 0.922 g/cm <sup>3</sup> | ASTM D1505        |
| Melt Index (190°C/2.16 kg) | 40 g/10 min             | 40 g/10 min             | ASTM D1238        |
| Peak Melting Temperature   | 232 °F                  | 111 °C                  | ExxonMobil Method |

| Thermal                     | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------|-------------------------|--------------------|---------------|
| Vicat Softening Temperature | 183 °F                  | 84 °C              | ASTM D1525    |

| Molded Properties            | Typical Value (English) | Typical Value (SI) | Test Based On |
|------------------------------|-------------------------|--------------------|---------------|
| Tensile Strength at Yield    | 1900 psi                | 13 MPa             | ASTM D638     |
| Tensile Strength at Break    | 1300 psi                | 8.8 MPa            | ASTM D638     |
| Elongation at Yield          | 40 %                    | 40 %               | ASTM D638     |
| Elongation at Break          | 70 %                    | 70 %               | ASTM D638     |
| Flexural Modulus - 1% Secant | 39000 psi               | 270 MPa            | ASTM D790     |
| Durometer Hardness           |                         |                    | ASTM D2240    |
| Shore A, 15 sec              | 90                      | 90                 |               |
| Shore D, 15 sec              | 47                      | 47                 |               |

| Impact                   | Typical Value (English) | Typical Value (SI) | Test Based On |
|--------------------------|-------------------------|--------------------|---------------|
| Instrumented Dart Impact |                         |                    | ASTM D3763    |
| -40°F (-40°C)            | 1.3 ft·lb               | 1.8 J              |               |
| 73°F (23°C)              | 11 ft·lb                | 16 J               |               |

### Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

This product is not intended for use in medical applications and should not be used in any such applications.

### Processing Statement

The test specimens were prepared using ASTM D4703, Procedure C.

### Notes

Typical properties: these are not to be construed as specifications.

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Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.