

# ExxonMobil™ LLDPE LL 5100.09

## Linear Low Density Polyethylene Resin

### Product Description

ExxonMobil™ LL 5100.09 is a linear low density polyethylene resin designed to provide good processability and ease of blending. The granular form of LL 5100.09 makes for efficient blending with pigments, slip additives, and antiblock additives.

### General

|              |                                                                                   |                                                                                                       |
|--------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Additive     | <ul style="list-style-type: none"> <li>Antiblock: No</li> <li>Slip: No</li> </ul> | <ul style="list-style-type: none"> <li>Processing Aid: No</li> <li>Thermal Stabilizer: Yes</li> </ul> |
| Applications | Masterbatch Base Resin                                                            |                                                                                                       |
| Form(s)      | Granules                                                                          |                                                                                                       |

| Resin Properties           | Typical Value (English) | Typical Value (SI)      | Test Based On     |
|----------------------------|-------------------------|-------------------------|-------------------|
| Density                    | 0.925 g/cm <sup>3</sup> | 0.925 g/cm <sup>3</sup> | ASTM D1505        |
| Melt Index (190°C/2.16 kg) | 20 g/10 min             | 20 g/10 min             | ASTM D1238        |
| Peak Melting Temperature   | 250 °F                  | 121 °C                  | ExxonMobil Method |

| Thermal                     | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------|-------------------------|--------------------|---------------|
| Vicat Softening Temperature | 189 °F                  | 87 °C              | ASTM D1525    |

| Molded Properties                    | Typical Value (English) | Typical Value (SI) | Test Based On |
|--------------------------------------|-------------------------|--------------------|---------------|
| Tensile Strength at Yield            | 2200 psi                | 16 MPa             | ASTM D638     |
| Tensile Strength at Break            | 1300 psi                | 9.2 MPa            | ASTM D638     |
| Elongation at Break                  | 60 %                    | 60 %               | ASTM D638     |
| Flexural Modulus - 1% Secant         | 60000 psi               | 410 MPa            | ASTM D790     |
| Durometer Hardness (Shore D, 15 sec) | 47                      | 47                 | ASTM D2240    |

| Impact                            | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------------|-------------------------|--------------------|---------------|
| Notched Izod Impact (73°F (23°C)) | 10 ft·lb/in             | 550 J/m            | ASTM D256A    |

