

ExxonMobil LDPE

LD 157CW

Wire & Cable Resin

Description

LD 157CW is a medium density LDPE recommended for the production of Low Voltage power cable insulation, using the one-step silane cross-linking technology.

The grade contains a higher level of antioxidants.

Sufficient Cu-inhibitor should be added to meet specific ageing requirements.

Applications

- One-step silane cross-linkable Low Voltage power cable insulation
- Telecommunications cable insulation

| Additive Package | Antiblock | Slip | Thermal Stabilizer |
|------------------|-----------|------|--------------------|
| LD 157CW | No | No | Yes |

| Resin Properties | Test Based On | Typical Value / Unit | |
|--------------------------|-------------------|-------------------------|--------|
| Melt Index | ASTM D 1238 | 0.6 g/10 min | |
| Density | ExxonMobil Method | 0.931 g/cm ³ | |
| Peak Melting Temperature | ExxonMobil Method | 115 °C | 239 °F |

Molded Properties¹

| | | | |
|--------------------------------|-------------|-----------------------------|------------|
| Flexural Modulus, 1% Secant | ASTM D 790 | 356 MPa | 52000 psi |
| Tensile Strength at Yield | ASTM D 638 | 14 MPa | 2030 psi |
| Tensile Strength at Break | ASTM D 638 | 16 MPa | 2320 psi |
| Elongation at Yield | ASTM D 638 | 13 % | |
| Elongation at Break | ASTM D 638 | 550 % | |
| Shore Hardness – D (15s) | ASTM D 2240 | 54 | |
| Volume Resistivity | ASTM D 257 | 6 * 10 ¹⁵ Ohm.cm | |
| Dielectric Constant (60 Hz) | ASTM D 150 | 2.20 | |
| Dissipation Factor (60 Hz) | ASTM D 150 | 1.0 * 10 ⁻³ | |
| Dielectric Strength (500V/sec) | ASTM D 149 | 59 V/μ | 1490 V/mil |

1. Specimens were compression molded in accordance with ASTM D 4703.

Revised January 2006