# Petrothene® PR92735

Linear Low Density Polyethylene

LyondellBasell Industries

## Message:

PETROTHENE PR92735 is a high molecular weight linear low density-based compound designed for cable jacketing. This resin contains a nominal carbon black content of 2.6% and antioxidant has been added to ensure thermal stability during processing. PR92735 also contains a processing aid.

| General Information | | | |
|---|---|---|---|
| Additive | Antioxidant<br>Carbon Black (3%) | | |
| Features | Antioxidant<br>High Molecular Weight | | |
| Uses | Cable Jacketing<br>Wire & Cable Applications | | |
| Agency Ratings | ASTM D 1248, I, Class C, Cat. 4, Grade E5<br>ASTM D 1248, I, Class C, Cat. 4, Grade J1<br>ASTM D 1248, I, Class C, Cat. 4, Grade J3<br>FED L-P-390C, Type III, Class L, Category 4, Grade 2<br>FED L-P-390C, Type III, Class L, Category 4, Grade 2<br>FED L-P-390C, Type III, Class L, Category 4, Grade 2<br>REA PE-200, Appendix E | | |
| Forms | Pellets | | |
| Processing Method | Extrusion | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Density | 0.930 | g/cm³ | ASTM D1505 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 0.72 | g/10 min | ASTM D1238 |
| Environmental Stress-Cracking Resistance (10% Igepal) | > 1000 | hr | ASTM D1693 |
| Absorption Coefficient | 440 | | ASTM D3349 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Durometer Hardness (Shore D) | 57 | | ASTM D2240 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus - 1% Secant | 248 | MPa | ASTM D638 |
| Tensile Strength | | | ASTM D638 |
| Yield | 11.0 | MPa | |
| Break | 16.6 | MPa | |

| | | | |
|---|---|---|---|
| Tensile Elongation (Break) | 650 | % | ASTM D638 |
| Flexural Modulus - 1% Secant | 366 | MPa | ASTM D790 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Brittleness Temperature | < -76.0 | °C | ASTM D746 |
| CLTE - Flow (23°C) | 2.0E-4 | cm/cm/°C | ASTM D696 |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Dielectric Strength | 20 | kV/mm | ASTM D149 |
| Dielectric Constant (1 MHz) | 2.50 | | ASTM D1531 |
| Dissipation Factor (1 MHz) | 4.0E-4 | | ASTM D1531 |
| **Extrusion** | **Nominal Value** | **Unit** | |
| Cylinder Zone 1 Temp. | 154 to 163 | °C | |
| Cylinder Zone 2 Temp. | 177 to 193 | °C | |
| Cylinder Zone 3 Temp. | 193 to 210 | °C | |
| Cylinder Zone 4 Temp. | 204 to 218 | °C | |
| Adapter Temperature | 204 to 218 | °C | |
| Die Temperature | 204 to 218 | °C | |



## Recommended distributors for this material

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