Technical Data Sheet

Petrothene GA601031

Linear Low Density Polyethylene

Product Description

The *Petrothene* GA601 series resins are pelletized linear low density polyethylenes selected by customers for applications that require maximum strength and toughness. These products offer excellent additive homogeneity, require no transfer equipment modification, and facilitate clean and safe handling. Typical applications include heavy duty shipping sacks, trash can liners, commercial and industrial packaging, as well as food and consumer packaging. The GA601 series resins offer enhanced film strength, drawdown, toughness and heat seal strength. In addition, these resins have excellent low temperature resistance for applications such as stretch film and frozen food packaging. The GA601 series resins can be purchased without additives or fully formulated with slip and antiblock.

| Application | Agriculture Film; Bags & Pouches; Can Liners; Film Wrap; Food Packaging Film; Heavy Duty Packaging; Lamination Film; Liner Film; Retail Carryout Bags; Shrink Film |
|-------------------|---|
| Market | Flexible Packaging |
| Processing Method | Blown Film |

| Typical Properties | Nominal Value | English Units | Nominal Value | SI Units | Test Method |
|----------------------------------|------------------|------------------|------------------|-------------|-------------|
| Physical | | | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 1.0 | g/10 min | 1.0 | g/10 min | ASTM D1238 |
| Base Resin Density, (23 °C) | 0.918 | g/cm³ | 0.918 | g/cm³ | ASTM D1505 |
| Product Density, (23 °C) | 0.922 | g/cm³ | 0.922 | g/cm³ | ASTM D1505 |
| Film | | | | | |
| Dart Drop Impact Strength, F50 | 190 | g | 190 | g | ASTM D1709 |
| Tensile Strength at Break | | | | | |
| MD | 8100 | psi | 55.8 | MPa | ASTM D882 |
| TD | 6100 | psi | 42.1 | MPa | ASTM D882 |
| Tensile Elongation at Break | | | | | |
| MD | 580 | % | 580 | % | ASTM D882 |
| TD | 700 | % | 700 | % | ASTM D882 |
| 1% Secant Modulus | | | | | |
| MD | 29000 | psi | 200 | MPa | ASTM D882 |
| TD | 32500 | psi | 224 | MPa | ASTM D882 |
| Elmendorf Tear Strength | | | | | |
| MD | 325 | g | 325 | g | ASTM D1922 |
| TD | 650 | g | 650 | g | ASTM D1922 |
| Thermal | | | | | |
| Vicat Softening Point | 221 | °F | 105 | °C | ASTM D1525 |
| Additive | | | | | |
| Slip | None | | None | | LYB Method |
| Antiblock | 6500 | ppm | 6500 | ppm | LYB Method |

