

Technical Data Sheet

Lupolen 2427K



Low Density Polyethylene

Product Description

Lupolen 2427 K is an additivated, low density polyethylene. It contains an antioxidant, slip and anti-blocking agent. It is characterized by a good processability. Films made from *Lupolen 2427 K* exhibit good optical properties. It is delivered in pellet form.

This product is not intended for use in medical and pharmaceutical applications.

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|--------------------------|---|
| Application | Food Packaging Film; Hygiene Film; Shrink Film |
| Market | Flexible Packaging |
| Processing Method | Blown Film; Cast Film |
| Attribute | Antioxidant; Good Heat Seal; Good Optical Properties; Good Processability; Low Friction; Unspecified Antiblocking; Unspecified Slip |

| Typical Properties | Nominal Value | Units | Test Method |
|-------------------------------------|---------------|-------------------|---------------|
| Physical | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 4.0 | g/10 min | ISO 1133-1 |
| Density | 0.924 | g/cm ³ | ISO 1183-1 |
| Mechanical | | | |
| Tensile Modulus | 260 | MPa | ISO 527-1, -2 |
| Tensile Stress at Yield | 11 | MPa | ISO 527-1, -2 |
| Film | | | |
| Dart Drop Impact Strength, F50 | 100 | g | ASTM D1709 |
| Tensile Strength | | | |
| MD | 19 | MPa | ISO 527-1, -3 |
| TD | 16 | MPa | ISO 527-1, -3 |
| Tensile Strain at Break | | | |
| MD | 300 | % | ISO 527-1, -3 |
| TD | 600 | % | ISO 527-1, -3 |
| Coefficient of Friction | <0.2 | | ISO 8295 |
| Impact | | | |
| Failure Energy | 3.5 | J/mm | DIN 53373 |
| Thermal | | | |
| Vicat Softening Temperature, (A/50) | 92 | °C | ISO 306 |
| Peak Melting Point | 111 | °C | ISO 11357-3 |
| Optical | | | |
| Haze, (50 µm) | <9 | % | ASTM D1003 |

| | | |
|---|------------|------------|
| Gloss | | |
| (20°) | >50 | ASTM D2457 |
| (60°) | >100 | ASTM D2457 |
| Additive | | |
| Slip, Erucamide | 600 ppm | LYB Method |
| Antiblock, Natural Silica | 1800 ppm | ISO 3451-1 |
| Additional Information | | |
| Test Specimen | Film | |
| Film properties tested using 50 µm thickness blown film extruded at a melt temperature of 170°C and a blow-up ratio of 2.5:1. | | |
| Processing Parameters | | |
| Extrusion Temperature | 150-190 °C | |
| Blown Film Extrusion | | |