



LLDPE 118WJ

Linear low density polyethylene for Blown film

Description

LLDPE 118WJ is a butene linear low density polyethylene resin for general purpose applications. Films produced from this resin are tough with excellent puncture resistance, high tensile strength and good hottack properties. The resin contains anti block and slip erucamide. LLDPE 118WJ is TN-PP free.

Application

Typical applications for LLDPE 118WJ are shipping sacks, ice bags, frozen food bags, liners, carrier bags, garbage bags, agriculture films, lamination and coextruded films, shrink film (for blending with LDPE), industrial consumer packaging and high clarity film if blended with (10-20%) LDPE.

Film properties

Film of 50 µm and BUR=2 has been produced on Kiefel IBC with 140 kg/h. Die size 200 mm, die gap 2,7 mm.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/ medical applications.

| Properties | Units SI | Values | Test methods |
|---|-------------------|-------------|--------------|
| Polymer properties | | | |
| Melt flow rate (MFR) at 190 °C and 2.16 kg | dg/min | 1.0 | ISO 1133 |
| Density ¹⁾ | kg/m ³ | 918 | ISO 1183 (A) |
| Formulation | | | |
| Slip | mg/kg | 1500 | SABIC method |
| Anti block | mg/kg | 3500 | SABIC method |
| Anti oxidant | | + | SABIC method |
| Optical properties | | | |
| Gloss (45°) | ‰ | 42 | ASTM D 2457 |
| Haze | % | 20 | ASTM D 1003A |
| Film properties | | | |
| Impact strength | kJ/m | 22 | ASTM D 4272 |
| Tear strength TD | kN/m | 120 | ISO 6383-2 |
| Tear strength MD | kN/m | 40 | ISO 6383-2 |
| Puncture resistance | J/m | 380 | SABIC method |
| Tensile test film | | | ISO 527-3 |
| Yield stress TD | MPa | 11 | |
| Yield stress MD | MPa | 11 | |
| Stress at break TD | MPa | 30 | |
| Stress at break MD | MPa | 37 | |
| Strain at break TD | % | 800 | |
| Strain at break MD | % | 600 | |
| Modulus of elasticity TD | MPa | 180 | |
| Modulus of elasticity MD | MPa | 160 | |
| Coefficient of friction | - | 0.1 | ISO 8295 |
| Blocking | g | 15 | SABIC method |
| Re-blocking | g | 10 | SABIC method |
| Thermal properties | | | |
| Vicat softening temperature at 10 N (VST/A) | °C | 101 | ISO 306 |
| DSC test melting point | °C | 121 | SABIC method |