

SABIC® LDPE 2100NOW

LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LDPE 2100NOW is a grade with very good toughness and biaxial shrink properties. The material contains no additives, has a very low energy consumption during processing and has good draw down ability.

Application

SABIC® LDPE 2100NOW is a heavy duty film grade typically used for applications like shrink hoods, industrial sacks, carrier bags and liners.

SABIC® LDPE 2100NOW can typically be used for food applications due to very low migration levels.

Film properties

Film properties have been measured at 50 µm films with a BUR of 3.

Films have been produced on Kiefel IBC film blown line at 200 kg/h. Die size 200 mm, die gap of 0.8 mm.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|------------------------------------|----------------|-------------------|--------------|
| POLYMER PROPERTIES | | | |
| Density | 921 | kg/m ³ | ISO 1183 |
| Melt Flow Rate (MFR) | | | |
| at 190 °C and 2.16 kg | 0.33 | dg/min | ISO 1133 |
| OPTICAL PROPERTIES | | | |
| Haze | 12 | % | ASTM D1003 |
| Clarity | 50 | mV | SABIC method |
| FILM PROPERTIES | | | |
| Impact strength | 30 | kJ/m | ASTM D4272 |
| Tear strength TD | 30 | kN/m | ISO 6383-2 |
| Tensile test film | | | |
| Stress at break TD | 23 | MPa | ISO 527-3 |
| Modulus of elasticity TD | 190 | MPa | ISO 527-3 |
| Yield stress TD | 11 | MPa | ISO 527-3 |
| Stress at break MD | 28 | MPa | ISO 527-3 |
| Tensile test film | | | |
| Strain at break MD | >200 | % | ISO 527-3 |
| Strain at break TD | >500 | % | ISO 527-3 |
| Coefficient of friction | 1.0 | - | ASTM D1894 |
| Blocking | 20 | g | SABIC method |
| Re-blocking | 10 | g | SABIC method |
| THERMAL PROPERTIES | | | |
| Vicat Softening Temperature | | | |
| at 10 N (VST/A) | 93 | °C | ISO 306 |