

SABIC® LDPE HP2023NN

LOW DENSITY POLYETHYLENE

DESCRIPTION

HP2023NN is a Low Density Polyethylene grade suitable for general-purpose packaging. It exhibits better draw down, good optical and mechanical properties. HP2023NN contains no slip, no antiblock and no antioxidant additives.

TYPICAL APPLICATIONS

Thin shrink film, lamination film, produce bags, textile packaging, soft goods packaging, general-purpose bags with good optics and t-shirts carrier bags.

TYPICAL PROPERTY VALUES

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|-------------------|--------------|
| POLYMER PROPERTIES | | | |
| Melt Flow Rate (MFR) | | | |
| 190°C and 2.16 kg | 2.0 | g/10 min | ASTM D1238 |
| Density | | | |
| at 23°C | 923 | kg/m ³ | ASTM D1505 |
| OPTICAL PROPERTIES ⁽¹⁾ | | | |
| Haze | 8 | % | ASTM D1003 |
| Gloss | | | |
| at 45° | 61 | % | ASTM D2457 |
| FILM PROPERTIES ⁽¹⁾ | | | |
| Tensile Properties | | | |
| stress at break, MD | 20 | MPa | ASTM D882 |
| stress at break, TD | 15 | MPa | ASTM D882 |
| strain at break, MD | 300 | % | ASTM D882 |
| strain at break, TD | 588 | % | ASTM D882 |
| stress at yield, MD | 12 | MPa | ASTM D882 |
| stress at yield, TD | 12 | MPa | ASTM D882 |
| 1% secant modulus, MD | 235 | MPa | ASTM D882 |
| 1% secant modulus, TD | 271 | MPa | ASTM D882 |
| Tear Resistance | | | |
| MD | 15 | g/μm | ASTM D1922 |
| TD | 11 | g/μm | ASTM D1922 |
| Dart Impact F50 | 2 | g | ASTM D1709 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Temperature | 92 | °C | ASTM D1525 |

(1) Properties have been measured by producing 30 μm film with 2.5 BUR using 100% HP2023NN.