

SABIC® LDPE HP4023WN

LOW DENSITY POLYETHYLENE

DESCRIPTION

HP4023WN is an antioxidant free low density polyethylene grade suitable for producing general-purpose films. It contains slip and antiblock additives. It gives excellent processability and optical properties with good mechanical properties.

TYPICAL APPLICATIONS

HP4023WN can be used for high clarity laundry bags, textile wrapping films, produce bags, zip lock bags.

TYPICAL PROPERTY VALUES

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|-------------------------------------|-------------------|--------------|
| POLYMER PROPERTIES | | | |
| Melt Flow Rate (MFR) | | | |
| at 190°C and 2.16 kg | 4.0 | g/10 min | ASTM D1238 |
| Density | | | |
| at 23°C | 923 | kg/m ³ | ASTM D1505 |
| FORMULATION | | | |
| Slip agent | <input checked="" type="checkbox"/> | - | - |
| Anti block agent | <input checked="" type="checkbox"/> | - | - |
| MECHANICAL PROPERTIES | | | |
| Dart Impact Strength ⁽¹⁾ | 2 | g/μm | ASTM D1709 |
| OPTICAL PROPERTIES ⁽¹⁾ | | | |
| Haze ⁽¹⁾ | 7 | % | ASTM D1003 |
| Gloss | | - | |
| at 45° | 60 | - | ASTM D2457 |
| FILM PROPERTIES ⁽¹⁾ | | | |
| Tensile Properties | | | |
| stress at break, MD | 27 | MPa | ASTM D882 |
| stress at break, TD | 11 | MPa | ASTM D882 |
| strain at break, MD | 105 | % | ASTM D882 |
| strain at break, TD | 440 | % | ASTM D882 |
| stress at yield, MD | 12 | MPa | ASTM D882 |
| stress at yield, TD | 10 | MPa | ASTM D882 |
| 1% secant modulus, MD | 195 | MPa | ASTM D882 |
| 1% secant modulus, TD | 180 | MPa | ASTM D882 |
| Tear Resistance | | | |
| MD | 17 | g/μm | ASTM D1922 |
| TD | 4 | g/μm | ASTM D1922 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Temperature | 91 | °C | ASTM D1525 |

⁽¹⁾ Properties have been measured by producing 30 μm film with 2.5 BUR using 100% HP4023WN.