

SABIC® LLDPE 920NT

LINEAR LOW DENSITY POLYETHYLENE REGION ASIA

DESCRIPTION

SABIC® 920NT is an ethylene-butene copolymer designed for blown film application. Excellent mechanical strength, tear and puncture resistance. 920NT contains no slip and no antiblock.

TYPICAL APPLICATIONS

Agriculture film, heavy duty film, general purpose packaging film, stretch film, carrier bag, inner liner, refuse bag, produce bag, frozen bag, co-extrusion film/pouch, etc.

TYPICAL PROPERTY VALUES

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|-------------------------|----------------|----------|--------------|
| POLYMER PROPERTIES | | | |
| Melt Flow Rate (MFR) | | | |
| at 190°C and 2.16 kg | 0.85 | g/10 min | ASTM D1238 |
| Density at 23°C | 920 | kg/m³ | ASTM D1505 |
| MECHANICAL PROPERTIES | | | |
| Tensile test | | | |
| stress at yield, MD | 10 | MPa | ASTM D882 |
| stress at yield, TD | 10 | MPa | ASTM D882 |
| stress at break, MD | 34 | MPa | ASTM D882 |
| stress at break, TD | 26 | MPa | ASTM D882 |
| elongation at break, MD | 550 | % | ASTM D882 |
| elongation at break, TD | 700 | % | ASTM D882 |
| OPTICAL PROPERTIES | | | |
| Gloss | | | |
| at 45° | 60 | - | ASTM D2457 |
| Haze (1) | 12 | % | ASTM D1003 |
| FILM PROPERTIES | | | |
| Dart Impact F50 | 118 | g | ASTM D1709 |
| Tear Resistance | | | |
| MD | 35 | g | ASTM D1922 |
| TD | 135 | g | ASTM D1922 |
| Puncture resistance | 75 | J/m | SABIC method |

⁽¹⁾ Properties have been measured by producing 30 μ film with 2.5 BUR using 100% 920NT.

PROCESSING CONDITIONS

Typical processing conditions for 920NT are:

Barrel temperature: 190 - 220°C

Blow up ratio: 2.0 - 3.0