



# SABIC® LDPE HP0323NN

## LOW DENSITY POLYETHYLENE

### DESCRIPTION

HP0323NN is a Low Density Polyethylene grade suitable for producing heavy-duty films. It gives outstanding toughness and optical properties in the film. It contains no slip, no antiblock and no antioxidant additives.

### TYPICAL APPLICATIONS

HP0323NN can be used for Heavy-duty bags, industrial shrink films, construction and agricultural films.

### TYPICAL PROPERTY VALUES

| PROPERTIES                                 | TYPICAL VALUES | UNITS             | TEST METHODS |
|--|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>                  |                |                   |              |
| <b>Melt Flow Rate (MFR)</b>                |                |                   |              |
| at 190°C and 2.16 kg                       | 0.30           | g/10 min          | ASTM D1238   |
| <b>Density</b>                             |                |                   |              |
| at 23°C                                    | 923            | kg/m <sup>3</sup> | ASTM D1505   |
| <b>MECHANICAL PROPERTIES</b>               |                |                   |              |
| <b>Dart Impact Strength</b> <sup>(1)</sup> | 2              | g/μm              | ASTM D1709   |
| <b>OPTICAL PROPERTIES</b> <sup>(1)</sup>   |                |                   |              |
| <b>Haze</b>                                | 15             | %                 | ASTM D1003   |
| <b>Gloss</b>                               |                |                   |              |
| at 45°                                     | 38             | %                 | ASTM D2457   |
| <b>FILM PROPERTIES</b> <sup>(1)</sup>      |                |                   |              |
| <b>Tensile Properties</b>                  |                |                   |              |
| stress at break, MD                        | 32             | MPa               | ASTM D882    |
| stress at break, TD                        | 30             | MPa               | ASTM D882    |
| strain at break, MD                        | 235            | %                 | ASTM D882    |
| strain at break, TD                        | 570            | %                 | ASTM D882    |
| stress at yield, MD                        | 12             | MPa               | ASTM D882    |
| stress at yield, TD                        | 12             | MPa               | ASTM D882    |
| 1% secant modulus, MD                      | 200            | MPa               | ASTM D882    |
| 1% secant modulus, TD                      | 260            | MPa               | ASTM D882    |
| <b>Tear Resistance</b>                     |                |                   |              |
| MD   | 2.4            | g/μm              | ASTM D1922   |
| TD   | 3              | g/μm              | ASTM D1922   |
| <b>THERMAL PROPERTIES</b>                  |                |                   |              |
| <b>Vicat Softening Temperature</b>         | 95             | °C                | ASTM D1525   |

(1) Properties have been measured by producing 50 μm film with 2.5 BUR using 100% HP0323NN.