



# SABIC® LDPE HP4024ZN

## LOW DENSITY POLYETHYLENE

### DESCRIPTION

HP4024ZN is a Low Density Polyethylene grade suitable for producing general-purpose films and it gives excellent processability and optical properties with good mechanical properties. HP4024ZN contains high level of slip and antiblock additives.

### TYPICAL APPLICATIONS

HP4024ZN can be used for high clarity laundry bags, textile wrapping films, produce bags, zip lock bags and master batch.

### 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         | 4.0            | g/10 min | ASTM D1238   |
| <b>Density</b>               |                |          |              |
| at 23°C                      | 923            | kg/m³    | ASTM D1505   |
| <b>FORMULATION</b>           |                |          |              |
| Slip agent                   | ☑              | -        | -            |
| Anti block agent             | ☑              | -        | -            |
| <b>MECHANICAL PROPERTIES</b> |                |          |              |
| Dart Impact Strength         | 2              | g/μm     | ASTM D1709   |
| <b>OPTICAL PROPERTIES</b>    |                |          |              |
| Haze <sup>(1)</sup>          | 6              | %        | ASTM D1003   |
| <b>Gloss</b>                 |                |          |              |
| at 45°                       | 68             | -        | ASTM D2457   |
| <b>FILM PROPERTIES</b>       |                |          |              |
| <b>Tensile Properties</b>    |                |          |              |
| stress at break, MD          | 32             | MPa      | ASTM D882    |
| stress at break, TD          | 24             | MPa      | ASTM D882    |
| strain at break, MD          | 265            | %        | ASTM D882    |
| strain at break, TD          | 600            | %        | ASTM D882    |
| stress at yield, MD          | 10             | MPa      | ASTM D882    |
| stress at yield, TD          | 10             | MPa      | ASTM D882    |
| 1% secant modulus, MD        | 277            | MPa      | ASTM D882    |
| 1% secant modulus, TD        | 224            | MPa      | ASTM D882    |
| <b>Tear Resistance</b>       |                |          |              |
| MD                           | 10             | g/μm     | ASTM D1922   |
| TD                           | 14             | g/μm     | ASTM D1922   |
| <b>THERMAL PROPERTIES</b>    |                |          |              |
| Vicat Softening Temperature  | 92             | °C       | ASTM D1525   |

(1) Properties have been measured by producing 30 μm film with 2.5 BUR using 100% HP4024ZN.