

POLYMERS

SABIC[®] LDPE

HP2023J

Low Density Polyethylene for Blown Film
(Provisional Datasheet)

PRODUCT DESCRIPTION:

SABIC[®] LDPE HP2023J is a Low Density Polyethylene grade formulated with slip and anti-block additives. It typically exhibits better draw down ability with high output. Films typically have good optics with low friction and low blocking.

Erucamide : 500 ppm
Natural Silica : 1000 ppm

TYPICAL APPLICATIONS:

Thin shrink film, lamination film, packaging films for food and industrial goods, bags & pouches. It also enables high speed converting without sticking.

This product is not intended for use in medical and pharmaceutical applications.

TYPICAL PROPERTY VALUES:

| PROPERTIES | Unit | Value ⁽¹⁾ | Test Method |
|---------------------------------------|-------------------|----------------------|-------------|
| Melt Flow Rate @ 190°C & 2.16 kg load | g/10 min. | 2 | ISO 1133 |
| Density @ 23°C | kg/m ³ | 923 | ISO 1183 |

THERMAL PROPERTIES

| | | | |
|--|----|------|----------|
| Vicat Softening Temperature (A50 (50°C/h 10N)) | °C | 94.0 | ISO 306 |
| Melting Temperature | °C | 111 | ISO 3146 |

FILM MECHANICAL PROPERTIES ⁽²⁾

| | | | |
|-----------------------------|-----|------|-------------|
| Tensile Stress @ Yield | MPa | 11 | ISO 527, -2 |
| Tensile Stress @ Break (MD) | MPa | 25 | ISO 527, -3 |
| Tensile Stress @ Break (TD) | MPa | 21 | ISO 527, -3 |
| Tensile Strain @ Break (MD) | % | 250 | ISO 527, -3 |
| Tensile Strain @ Break (TD) | % | 600 | ISO 527, -3 |
| Tensile Modulus | MPa | 260 | ISO 527, -2 |
| Dart Drop Impact | g | 110 | ASTM D 1709 |
| Coefficient of Friction | % | < 20 | ISO 8295 |

FILM OPTICAL PROPERTIES ⁽²⁾

| | | | |
|-------------|---|------|--------|
| Haze | % | < 9 | D 1003 |
| Gloss (20°) | % | >50 | D 2457 |
| Gloss (60°) | % | >100 | D 2457 |

(1) Typical values; not to be construed as specifications

(2) Measured on 50 micron thickness blown film extruded at melt temperature of 180°C with BUR of 2.5

PROCESSING CONDITIONS:

Typical processing conditions for HP2023J are:

Melt temperature : 160 - 200°C

Blow up ratio : 2 - 3

Recommended thickness : 20 - 60 micron