

## Technical Data Sheet

### *Lupolen* 3026K

Low Density Polyethylene



#### Product Description

*Lupolen* 3026 K is an additivated, low density polyethylene. It contains slip and anti-blocking agent.

It is characterized by a good processability.

LyondellBasell customers report that films made from *Lupolen* 3026 K exhibit a glossy surface finish.

*Lupolen* 3026 K provides the option to produce films with very good optical properties.

It is delivered in pellet form.

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

|                          |                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | Food Packaging Film; Lamination Film; Shrink Film                                                                          |
| <b>Market</b>            | Flexible Packaging                                                                                                         |
| <b>Processing Method</b> | Blown Film; Cast Film                                                                                                      |
| <b>Attribute</b>         | Good Heat Seal; Good Processability; Low Friction; Superior Optical Properties; Unspecified Antiblocking; Unspecified Slip |

| Typical Properties                    | Nominal Value | Units             | Test Method   |
|---------------------------------------|---------------|-------------------|---------------|
| <b>Physical</b>                       |               |                   |               |
| Melt Flow Rate, (190 °C/2.16 kg)      | 4.0           | g/10 min          | ISO 1133-1    |
| Density                               | 0.928         | g/cm <sup>3</sup> | ISO 1183-1    |
| <b>Mechanical</b>                     |               |                   |               |
| Tensile Modulus                       | 300           | MPa               | ISO 527-1, -2 |
| Tensile Stress at Yield               | 13            | MPa               | ISO 527-1, -2 |
| <b>Film</b>                           |               |                   |               |
| Dart Drop Impact Strength, F50        | 90            | g                 | ASTM D1709    |
| Tensile Strength                      |               |                   |               |
| MD                                    | 20            | MPa               | ISO 527-1, -3 |
| TD                                    | 15            | MPa               | ISO 527-1, -3 |
| Tensile Strain at Break               |               |                   |               |
| MD                                    | 300           | %                 | ISO 527-1, -3 |
| TD                                    | 550           | %                 | ISO 527-1, -3 |
| Coefficient of Friction               | <0.2          |                   | ISO 8295      |
| <b>Impact</b>                         |               |                   |               |
| Failure Energy                        | 3.5           | J/mm              | DIN 53373     |
| <b>Thermal</b>                        |               |                   |               |
| Vicat Softening Temperature, (A/50 N) | 97            | °C                | ISO 306       |
| Peak Melting Point                    | 114           | °C                | ISO 11357-3   |



| Optical                   |                                                                                                                               |     |            |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----|------------|
| Haze, (50 μm)             | <8                                                                                                                            | %   | ASTM D1003 |
| Gloss                     |                                                                                                                               |     |            |
| (20°)                     | >70                                                                                                                           |     | ASTM D2457 |
| (60°)                     | >110                                                                                                                          |     | ASTM D2457 |
| Additive                  |                                                                                                                               |     |            |
| Slip, Erucamide           | 700                                                                                                                           | ppm | LYB Method |
| Antiblock, Natural Silica | 1000                                                                                                                          | ppm | ISO 3451-1 |
| Additional Information    |                                                                                                                               |     |            |
| Test Specimen             | Film properties tested using 50 μm thickness blown film extruded at a melt temperature of 170°C and a blow-up ratio of 2.5:1. |     |            |
|                           |                                                                                                                               |     |            |
| Processing Parameters     |                                                                                                                               |     |            |
| Extrusion Temperature     | 150-190                                                                                                                       | °C  |            |

## Notes

These are typical property values not to be construed as specification limits.

