

## Technical Data Sheet

### Lupolen 2426F

Low Density Polyethylene



#### Product Description

Lupolen 2426 F is an additivated, low density polyethylene. It contains slip and anti-blocking agent. It is characterized by a good melt strength leading to a good bubble stability during blown film extrusion. It is delivered in pellet form.

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

|                          |                                                                                                                                            |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | Bags & Pouches; Food Packaging Film; Hygiene Film; Shrink Film                                                                             |
| <b>Market</b>            | Flexible Packaging                                                                                                                         |
| <b>Processing Method</b> | Blown Film                                                                                                                                 |
| <b>Attribute</b>         | Good Heat Seal; Good Melt Strength; Good Optical Properties; Good Processability; Low Friction; Unspecified Antiblocking; Unspecified Slip |

| Typical Properties                    | Nominal Value | Units             | Test Method   |
|---------------------------------------|---------------|-------------------|---------------|
| <b>Physical</b>                       |               |                   |               |
| Melt Flow Rate, (190 °C/2.16 kg)      | 0.75          | g/10 min          | ISO 1133-1    |
| Density                               | 0.924         | g/cm <sup>3</sup> | ISO 1183-1    |
| <b>Mechanical</b>                     |               |                   |               |
| Tensile Modulus                       | 260           | MPa               | ISO 527-1, -2 |
| Tensile Stress at Yield               | 11            | MPa               | ISO 527-1, -2 |
| <b>Film</b>                           |               |                   |               |
| Dart Drop Impact Strength, F50        | 150           | g                 | ASTM D1709    |
| Tensile Strength                      |               |                   |               |
| MD                                    | 24            | MPa               | ISO 527-1, -3 |
| TD                                    | 22            | MPa               | ISO 527-1, -3 |
| Tensile Strain at Break               |               |                   |               |
| MD                                    | 300           | %                 | ISO 527-1, -3 |
| TD                                    | 600           | %                 | ISO 527-1, -3 |
| Coefficient of Friction               | <0.2          |                   | ISO 8295      |
| <b>Impact</b>                         |               |                   |               |
| Failure Energy                        | 5.5           | J/mm              | DIN 53373     |
| <b>Thermal</b>                        |               |                   |               |
| Vicat Softening Temperature, (A/50 N) | 96            | °C                | ISO 306       |
| Peak Melting Point                    | 111           | °C                | ISO 11357-3   |
| <b>Optical</b>                        |               |                   |               |
| Haze, (50 µm)                         | <8            | %                 | ASTM D1003    |



|                                                                                                                               |         |     |            |
|-------------------------------------------------------------------------------------------------------------------------------|---------|-----|------------|
| Gloss                                                                                                                         |         |     |            |
| (20°)                                                                                                                         | >40     |     | ASTM D2457 |
| (60°)                                                                                                                         | >90     |     | ASTM D2457 |
| Additive                                                                                                                      |         |     |            |
| Slip, Erucamide                                                                                                               | 500     | ppm | LYB Method |
| Antiblock, Natural Silica                                                                                                     | 900     | ppm | ISO 3451-1 |
| Additional Information                                                                                                        |         |     |            |
| Test Specimen                                                                                                                 | Film    |     |            |
| Film properties tested using 50 µm thickness blown film extruded at a melt temperature of 180°C and a blow-up ratio of 2.5:1. |         |     |            |
| Processing Parameters                                                                                                         |         |     |            |
| Extrusion Temperature                                                                                                         | 170-220 | °C  |            |

## Notes

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

