

# Technical Data Sheet

## Lupolen 2227K



Low Density Polyethylene

### Product Description

Lupolen 2227K is a homopolymer low density polyethylene resin designed for film applications requiring premium clarity and stiffness. 2227K is selected by customers for bread bags, light produce, food packaging, zipper bags and other packaging films enhanced by clarity and sparkle. 2227K contains an antioxidant.

### Regulatory Status

For regulatory compliance information, see Lupolen 2227K [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

|                          |  |
|--------------------------|--|
| <b>Status</b>            | Commercial: Active   |
| <b>Availability</b>      | Africa-Middle East; Asia-Pacific; South & Central America                                  |
| <b>Application</b>       | Bags & Pouches; Clarity Film; Compounding; Film Wrap; Food Packaging Film; Lamination Film |
| <b>Market</b>            | Compounding; Flexible Packaging  |
| <b>Processing Method</b> | Blown Film; Cast Film; Compounding   |

| Typical Properties               | Nominal Value | Units             | Test Method |
|----------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                  |               |                   |             |
| Melt Flow Rate, (190 °C/2.16 kg) | 4.0           | g/10 min          | ASTM D1238  |
| Base Resin Density, (23 °C)      | 0.9225        | g/cm <sup>3</sup> | ASTM D1505  |
| Product Density, (23 °C)         | 0.9230        | g/cm <sup>3</sup> | ASTM D1505  |
| <b>Film</b>                      |               |                   |             |
| Dart Drop Impact Strength, F50   | 110           | g                 | ASTM D1709  |
| Tensile Strength at Break        |               |                   |             |
| MD                               | 21            | MPa               | ASTM D882   |
| TD                               | 19            | MPa               | ASTM D882   |
| Tensile Strength at Yield        |               |                   |             |
| MD                               | 11            | MPa               | ASTM D882   |
| TD                               | 12            | MPa               | ASTM D882   |
| Tensile Elongation at Break      |               |                   |             |
| MD                               | 400           | %                 | ASTM D882   |
| TD                               | 550           | %                 | ASTM D882   |
| 1% Secant Modulus                |               |                   |             |
| MD                               | 210           | MPa               | ASTM D882   |
| TD                               | 230           | MPa               | ASTM D882   |
| Elmendorf Tear Strength          |               |                   |             |
| MD                               | 250           | g                 | ASTM D1922  |
| TD                               | 250           | g                 | ASTM D1922  |
| <b>Optical</b>                   |               |                   |             |
| Haze                             | 5.5           | %                 | ASTM D1003  |
| Gloss                            | 75            |                   | ASTM D2457  |
| <b>Additive</b>                  |               |                   |             |

|           |         |            |
|-----------|---------|------------|
| Slip      | 750 ppm | LYB Method |
| Antiblock | 900 ppm | LYB Method |

## Notes

Data obtained from 50 micron film produced on a 50 mm extruder with a 100 mm die, 175°C melt temperature, 2.5:1 BUR, 0.635 mm die gap at 27 kg/hr.

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

## Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

## Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

© LyondellBasell Industries Holdings, B.V. 2018

## Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

## Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.