

### Technical Data Sheet



### Microthene MP574189

Linear Low Density Polyethylene

#### Product Description

Microthene MP574189 exhibits excellent flow and impact with good stiffness. Typical applications include lids, closures, containers, housewares and medical items. MP574189 is 16 mesh powder and is also available in pellet form *Petrothene* GA574189.

#### Regulatory Status

For regulatory compliance information, see *Microthene* MP574189 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

|                   |                   |
|-------------------|-------------------|
| Status            | Commercial        |
| Availability      | North America     |
| Market            | Rigid Packaging   |
| Processing Method | Injection Molding |

| Typical Properties                                      | Nominal Value | English Units     | Nominal Value | SI Units          | Test Method |
|---------------------------------------------------------|---------------|-------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                         |               |                   |               |                   |             |
| Melt Flow Rate, (190 °C/2.16 kg)                        | 50            | g/10 min          | 50            | g/10 min          | ASTM D1238  |
| Density, (23 °C)                                        | 0.926         | g/cm <sup>3</sup> | 0.926         | g/cm <sup>3</sup> | ASTM D1505  |
| Spiral Flow                                             | 17.9          | in                | 45.4          | cm                | LYB Method  |
| <b>Mechanical</b>                                       |               |                   |               |                   |             |
| Flexural Modulus                                        |               |                   |               |                   |             |
| (1% Secant)                                             | 70000         | psi               | 480           | MPa               | ASTM D790   |
| (2% Secant)                                             | 61000         | psi               | 420           | MPa               | ASTM D790   |
| Tensile Strength at Break, (23 °C)                      | 1300          | psi               | 9             | MPa               | ASTM D638   |
| Tensile Strength at Yield, (23 °C)                      | 2200          | psi               | 15            | MPa               | ASTM D638   |
| Tensile Elongation at Yield, (23 °C)                    | 11            | %                 | 11            | %                 | ASTM D638   |
| <b>Hardness</b>                                         |               |                   |               |                   |             |
| Shore Hardness, (Shore D)                               | 60            |                   | 60            |                   | ASTM D2240  |
| <b>Thermal</b>                                          |               |                   |               |                   |             |
| Vicat Softening Temperature                             | 184           | °F                | 84            | °C                | ASTM D1525  |
| Low Temperature Brittleness, F <sub>50</sub>            | -98           | °F                | -72           | °C                | ASTM D746   |
| Deflection Temperature Under Load, (66 psi, Unannealed) | 117           | °F                | 47            | °C                | ASTM D648   |



### Notes

Tensile properties were run with a crosshead speed of 20 inches/min or 500 mm/min.

Flexural Modulus properties were run with a crosshead speed of 0.5 inches/min or 12.5 mm/min.

Spiral Flow measures the number of inches of flow produced when molten resin is injected into a long, spiral channel (0.0625" insert), at a constant injection pressure of 1000 psi with a melt temperature of 440 °F.

Deflection Temperature Under Load and Low Temperature Brittleness data are for control and development work and are not intended for use in design or predicting performance at elevated or sub-ambient temperatures.

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/>.

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