

Technical Data Sheet

**Microthene F FN51000**Low Density Polyethylene
LyondellBasell Industries**Product Description**

Microthene F polyolefin powders are ultra-fine, spherically shaped particles with narrow size distribution suitable for use in a broad range of specialty applications. Microthene F powders combine the unique properties of a polyolefin resin with a microfine particle size.

General

Material Status	• Commercial: Active
Availability	• North America
Forms	• Powder

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.923 g/cm ³	0.923 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	5.3 g/10 min	5.3 g/10 min	ASTM D1238
Average Particle Size	0.79 mil	20 µm	ETM Malvern
Particle Shape	Spherical	Spherical	
Particle Size Distribution	0.2 to 2.0 mil	5.0 to 50.0 µm	ETM Malvern
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Break)	1800 psi	12.4 MPa	ASTM D638
Tensile Elongation (Break)	550 %	550 %	ASTM D638
Flexural Modulus	40000 psi	276 MPa	ASTM D790
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	53	53	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-105 °F	-76.0 °C	ASTM D746
Vicat Softening Temperature	207 °F	97.0 °C	ASTM D1525
Peak Melting Temperature	230 °F	110 °C	ASTM D3418
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Maximum Moisture Content	0.10 %	0.10 %	ETM 156

Notes

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.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

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

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