

# Microthene FN51000

## LyondellBasell Industries - Low Density Polyethylene

### General Information

#### 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

Uses	<ul style="list-style-type: none"> <li>Automotive Applications</li> <li>Automotive Interior Parts</li> <li>Color Concentrates</li> </ul>	<ul style="list-style-type: none"> <li>Construction Applications</li> <li>Consumer Applications</li> <li>Flexible Packaging</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Applications</li> <li>Medical/Healthcare Applications</li> <li>Structural Parts</li> </ul>
Forms	<ul style="list-style-type: none"> <li>Powder</li> </ul>		

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density (23°F)	0.923	g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	5.2	g/10 min	ASTM D1238
Average Particle Size	0.79	mil	Internal Method
Moisture Content	< 0.10	%	Internal Method
Particle Shape	Spherical		Internal Method
Particle Size Distribution	0.2 to 2.0	mil	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	1800	psi	ASTM D638
Tensile Elongation (Break)	550	%	ASTM D638
Flexural Modulus	40000	psi	ASTM D790
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	53		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	< -105	°F	ASTM D746
Vicat Softening Temperature	207	°F	ASTM D1525
Peak Melting Temperature	230	°F	ASTM D3418