

Technical Data Sheet



Microthene FN51900

Low Density Polyethylene

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.

Regulatory Status

For regulatory compliance information, see *Microthene FN51900 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS)*.

Status	Commercial: Active
Availability	North America
Application	Automotive Parts; Colour Concentrates; Industrial; Interior Automotive Applications; Structural Parts
Market	Consumer Products; Flexible Packaging; Healthcare; Industrial, Building & Construction
Processing Method	Powders

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	5.2	g/10 min	5.2	g/10 min	ASTM D1238
Density, (23 °C)	0.923	g/cm³	0.923	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus	40000	psi	275.8	MPa	ASTM D790
Tensile Strength at Break	1800	psi	12.4	MPa	ASTM D638
Tensile Elongation at Break	550	%	550	%	ASTM D638
Hardness					
Shore Hardness, (Shore D)	53		53		ASTM D2240
Thermal					
Vicat Softening Point	206.6	°F	97.0	°C	ASTM D1525
Low Temperature Brittleness	<-105	°F	<-76	°C	ASTM D746
Peak Melting Point	230.0	°F	110.0	°C	ASTM D3418
Additional Information					
Particle Shape	Spherical		Spherical		LYB Method
Average Particle Size	20 micron		20 micron		LYB Method
Particle Size Distribution	5 - 50 micron		5 - 50 micron		LYB Method
Moisture Content	<=0.1 %		<=0.1 %		LYB Method



Notes

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

Processing Techniques

The microfine size and spherical shape of *Microthene F* powders facilitate dispersion in aqueous or organic systems.

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. 2026

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.

