Technical Data Sheet

Microthene FN50100

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* FN50100 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)	22	g/10 min	22	g/10 min	ASTM D1238
Density, (23 °C)	0.915	g/cm³	0.915	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus	31900	psi	220	MPa	ASTM D790
Tensile Strength at Break	1300	psi	9.0	MPa	ASTM D638
Tensile Elongation at Break	600	%	600	%	ASTM D638
Hardness					
Shore Hardness					
(Shore D, max)	50		50		ASTM D2240
(Shore D, 15 sec)	40		40		ASTM D2240
Thermal					
Vicat Softening Point	180.3	°F	82.4	°C	ASTM D1525
Low Temperature Brittleness	-67.0	°F	-55.0	°C	ASTM D746
Peak Melting Point	206.1	°F	102.4	°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/.

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