

Technical Data Sheet

**Microthene G GR 51100**Low Density Polyethylene
LyondellBasell Industries**Product Description**

GR 51100 polyolefin powders are ground, irregularly-shape particles for use in a broad range of specialty applications. GR 51100 powders combine the unique properties of a polyolefin resin with a small ground particle size.

General

Material Status	• Commercial: Active
Availability	• North America
Uses	• Automotive Applications • Industrial Applications • Color Concentrates • Structural Parts
Appearance	• Natural Color
Forms	• Powder

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.915 g/cm ³	0.915 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	22 g/10 min	22 g/10 min	ASTM D1238
Mean Particle Size ¹	115 Micron	115 Micron	
Moisture Content ¹	< 0.10 %	< 0.10 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Break)	1310 psi	9.00 MPa	ASTM D638
Tensile Elongation (Break)	600 %	600 %	ASTM D638
Flexural Modulus	31900 psi	220 MPa	ASTM D790
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	50	50	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-67.0 °F	-55.0 °C	ASTM D746
Vicat Softening Temperature	180 °F	82.4 °C	ASTM D1525
Peak Melting Temperature	216 °F	102 °C	ASTM D3418

Notes

¹ LYB Method

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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