

Technical Data Sheet**Microthene MN71120**

Low Density Polyethylene
LyondellBasell Industries
Engineering Plastics

Product Description

MICROTHENE MN 711-20 is a very high flow, rotational molding powder for general-purpose applications. MN 711-20 can be used to produce a variety of rotomolded objects including toys, containers and liners.

MN 711-20 produces parts with smooth inner surfaces and good impact strength. MN 711-20 also provides consistent shrinkage characteristics, good warp resistance and is available as a 35-mesh powder.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific • Europe	• Latin America • North America	
Features	• Food Contact Acceptable • General Purpose	• Good Impact Resistance • High Flow	
Uses	• Containers	• Liners	• Toys
Forms	• Powder		
Processing Method	• Rotational Molding		

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
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693A
10% Igepal, Rotational Molded, F50	< 1.00 hr	< 1.00 hr	
100% Igepal, Rotational Molded, F50	1.00 hr	1.00 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹			ASTM D638
Yield, 0.125 in (3.18 mm), Rotational Molded	11400 psi	78.6 MPa	
Flexural Modulus - 1% Secant			ASTM D790
0.125 in (3.18 mm), Rotational Molded	20100 psi	139 MPa	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, Rotational Molded	104 °F	40.0 °C	
264 psi (1.8 MPa), Unannealed, Rotational Molded	73.4 °F	23.0 °C	

Additional Information

Low Temperature Impact, ARM STD, -40°F, 0.125 in, Rotational Molded: 30 ft-lbs
Low Temperature Impact, ARM STD, -40°F, 0.25 in, Rotational Molded: 60 ft-lbs

Notes

¹ Type IV, 2.0 in/min (51 mm/min)

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

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