

Technical Data Sheet

**Microthene MP655962**

High Density Polyethylene
LyondellBasell Industries
Engineering Plastics

Product Description

Microthene MP655962 is a rotational molding powder that produces items with very smooth inner surface under a wide range of processing conditions. MP655962 is selected by customers to make a variety of rotomolded items including light globes, storage containers, traffic crash barriers, ducting and equipment housings. This resin exhibits high impact strength at both room temperature and -40°F. It has good warp resistance and stiffness. MP655962 is a UV-stabilized, 35-mesh powder and is also available in pellet form as Petrothene GA655962.

General

General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• Latin America • North America
Additive	• UV Stabilizer	
Features	• Good Impact Resistance • Good Stiffness	• Low Temperature Impact Resistance • Warp Resistant
Uses	• Containers	• Housings
Forms	• Powder	
Processing Method	• Rotational Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.945 g/cm ³	0.945 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 10% Igepal CO-630, F50	30.0 hr	30.0 hr	ASTM D1693A
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield)	3300 psi	22.8 MPa	ASTM D638
Flexural Modulus			ASTM D790
1% Secant	144000 psi	993 MPa	
2% Secant	122000 psi	841 MPa	
Impact	Nominal Value (English)	Nominal Value (SI)	
ARM Impact			
-40°F (-40°C), 0.13 in (3.18 mm)	35.0 ft·lb	47.5 J	
-40°F (-40°C), 0.25 in (6.35 mm)	135 ft·lb	183 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	151 °F	66.0 °C	
264 psi (1.8 MPa), Unannealed	108 °F	42.0 °C	

Notes

¹ 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

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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