

Technical Data Sheet

**Microthene MP652962**

High Density Polyethylene
LyondellBasell Industries
Engineering Plastics

Product Description

Microthene MP652962 is a hexene HDPE powder selected by customers for rotationally molding large tank applications. MP652962 is a UV-stabilized, 35-mesh powder and is also available in pellet form as Petrothene GA652962.

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• UV Stabilizer
Features	• Hexene Comonomer
Uses	• Tanks
Forms	• Powder
Processing Method	• Rotational Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.942 g/cm ³	0.942 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693A
10% Igepal CO-630, F50	50.0 hr	50.0 hr	
100% Igepal CO-630, F50	400 hr	400 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield)	3400 psi	23.4 MPa	ASTM D638
Tensile Elongation ¹ (Yield)	10 %	10 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant	147000 psi	1010 MPa	
2% Secant	124000 psi	855 MPa	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Impact Strength			ARM
-40°F (-40°C), 0.125 in (3.18 mm)	40 ft·lb	54 J	
-40°F (-40°C), 0.250 in (6.35 mm)	160 ft·lb	217 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	149 °F	65.0 °C	
264 psi (1.8 MPa), Unannealed	109 °F	43.0 °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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