

Microthene® MP672762

High Density Polyethylene
LyondellBasell Industries

Technical Data

Product Description

Microthene MP672762 is a hexene HDPE powder used mainly for rotationally molding large tank applications. MP672762 is a UV-stabilized, 35-mesh powder and is also available in pellet form as Petrothene GA672762.

General

Material Status	• Commercial: Active	
Literature ¹	• Processing - Mold Shrink (English) • Processing - Polyolefin Injection Molding Guide (English) • Technical Datasheet (English)	
Search for UL Yellow Card	• LyondellBasell Industries	
Availability	• Asia Pacific • Europe	• North America • South America
Features	• Good UV Resistance	
Uses	• Tanks	
Agency Ratings	• FDA 21 CFR 177.1520	
Forms	• Pellets	• Powder

Physical	Nominal Value Unit	Test Method
Density	0.944 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) ³ (190°C/2.16 kg)	1.7 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance ⁴		ASTM D1693
10% Igepal CO-630, F50	72.0 hr	
100% Igepal CO-630, F50	1000 hr	

Mechanical	Nominal Value Unit	Test Method
Tensile Strength ^{5, 6} (Yield, 3.18 mm)	22.1 MPa	ASTM D638
Flexural Modulus - 1% Secant ⁶ (3.18 mm)	981 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Tensile Impact Strength		
-40°C, 3.18 mm ⁷	98.8 kJ/m ²	ARM
-40°C, 6.35 mm ⁶	378 kJ/m ²	ASTM D1822

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed, 3.18 mm ⁶	70.0 °C	
1.8 MPa, Unannealed, 3.18 mm	44.0 °C	

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ Powder

⁴ Compression Molded

⁵ 51 mm/min

⁶ Rotomolded

⁷ Low Temperature; Rotomolded