

Microthene® MP652762

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Microthene MP652762 is a hexene HDPE powder used mainly for rotationally molding large tank applications. MP652662 is a UV 8-stabilized, 35-mesh powder and is also available in pellet form as Petrothene GA652762.

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	
Additive	• Long Term UV-8 Stabilizer		
Features	• Food Contact Acceptable	• Good UV Resistance	• Hexene Comonomer
Uses	• Containers	• Industrial Tanks	
Agency Ratings	• FDA 21 CFR 177.1520		
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value Unit	Test Method
Density	0.942 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance		ASTM D1693A
10% Igepal CO-630, Rotational Molded, F50	720 hr	
100% Igepal CO-630, Rotational Molded, F50	48.0 hr	

Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³		ASTM D638
Yield, 3.18 mm, Rotational Molded	22.2 MPa	
Tensile Elongation ⁴		ASTM D638
Yield, Rotational Molded	18 %	
Flexural Modulus - 1% Secant ⁴ (Rotational Molded)	896 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Low Temperature Impact - Rotational Molded		ARM
-40°C, 3.18 mm	108 J	
-40°C, 6.35 mm	258 J	

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed, Rotational Molded	67.0 °C	
1.8 MPa, Unannealed, Rotational Molded	42.0 °C	
Peak Melting Temperature	129 °C	ASTM D3418

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 Type IV, 51 mm/min

⁴ Type IV