

Alathon® M6062

High Density Polyethylene
LyondellBasell Industries

Technical Data

Product Description

ALATHON M 6062 is a narrow molecular weight distribution homopolymer that exhibits excellent stiffness and impact resistance. Typical applications include cases, totes, crates and open-head pails.

General

Material Status	• Commercial: Active		
Literature ¹	• Processing - Mold Shrink (English) • Processing - Polyolefin Injection Molding Guide (English) • Processing - Start-Up Guide (English)		
Search for UL Yellow Card	• LyondellBasell Industries • Alathon®		
Availability	• Asia Pacific • Europe	• North America • South America	
Features	• Food Contact Acceptable • Good Impact Resistance	• Good Stiffness • Homopolymer	• Narrow Molecular Weight Distribution
Uses	• Crates	• Pails	
Agency Ratings	• FDA 21 CFR 177.1520		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density	0.959 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.0 g/10 min	ASTM D1238

Mechanical	Nominal Value Unit	Test Method
Tensile Strength		ASTM D638
Yield ³	30.2 MPa	
Break	24.1 MPa	
Tensile Elongation ³ (Yield)	7.9 %	ASTM D638
Flexural Modulus ⁴		ASTM D790
1% Secant	1410 MPa	
2% Secant	1150 MPa	

Hardness	Nominal Value Unit	Test Method
Durometer Hardness (Shore D)	67	ASTM D2240

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed	68.9 °C	
Brittleness Temperature	-76.1 °C	ASTM D746
Vicat Softening Temperature	126 °C	ASTM D1525

Additional Information

Spiral Flow, Equistar Test Method, 0.625 in insert, 1000 psi injection pressure, 440°F melt temperature: 8.2 in

Injection	Nominal Value Unit
Rear Temperature	232 °C
Middle Temperature	243 °C
Front Temperature	246 °C
Nozzle Temperature	246 °C