

Alathon® H6030

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

ALATHON H 6030 is a homopolymer that provides enhanced processability, excellent stiffness and short molding cycles. Typical applications include thin wall and deep-draw.

General

Material Status	• Commercial: Active		
Literature ¹	• Processing - Mold Shrink (English) • Processing - Polyolefin Injection Molding Guide (English) • Processing - Start-Up Guide (English) • Technical Datasheet (English)		
Search for UL Yellow Card	• LyondellBasell Industries • Alathon®		
Availability	• Asia Pacific • Europe	• North America • South America	
Features	• Fast Molding Cycle • Food Contact Acceptable	• Good Processability • Good Stiffness	• Homopolymer
Uses	• Thin-walled Parts		
Agency Ratings	• FDA 21 CFR 177.1520		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density	0.965 g/cm ³	ASTM D1505
Apparent Density	0.59 to 0.63 g/cm ³	ASTM D1895
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	30 g/10 min	ASTM D1238
Spiral Flow ^{3, 4}	39.9 cm	Internal Method

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus ⁵		ASTM D638
--	1080 MPa	
1% Secant	931 MPa	
Tensile Strength (Break)	28.3 MPa	ASTM D638
Tensile Elongation ⁶ (Break)	4.4 %	ASTM D638
Flexural Modulus ⁷		ASTM D790
--	1660 MPa	
1% Secant	1540 MPa	
2% Secant	1290 MPa	

Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C)	21 J/m	ASTM D256
Unnotched Izod Impact (-18°C)	280 J/m	ASTM D4812

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	82.8 °C	ASTM D648
Vicat Softening Temperature	127 °C	ASTM D1525
Peak Melting Temperature	132 °C	ASTM D3418
Peak Crystallization Temperature (DSC)	117 °C	ASTM D3418

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