

Alathon® L5045

High Density (MMW) Polyethylene

LyondellBasell Industries

Technical Data

Product Description

ALATHON L5045 is a medium molecular weight high density copolymer for use in blown film extrusion applications. Typical applications include millinery bags, coextrusions and plastic netting.

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	• Copolymer	• Food Contact Acceptable	• Medium Molecular Weight
Uses	• Bags	• Film	• Netting
Agency Ratings	• FDA 21 CFR 177.1520		
Forms	• Pellets		
Processing Method	• Blown Film	• Coextrusion	

Physical	Nominal Value Unit	Test Method
Density	0.950 g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.45 g/10 min	ASTM D1238

Films	Nominal Value Unit	Test Method
Secant Modulus		ASTM D882
MD	758 MPa	
TD	1000 MPa	
Tensile Strength		ASTM D882
MD: Yield	23.4 MPa	
TD: Yield	26.9 MPa	
MD: Break	48.3 MPa	
TD: Break	28.3 MPa	
Tensile Elongation		ASTM D882
MD: Break	530 %	
TD: Break	970 %	
Elmendorf Tear Strength		ASTM D1922
MD	35 g	
TD	1200 g	

Extrusion	Nominal Value Unit
Melt Temperature	199 to 210 °C

Extrusion Notes

Typical Extrusion Conditions
2.0 mil Blown Film
Blow-up Ratio: 2.5:1
Die Gap: 60 mil

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.