

Alathon® M5010

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Alathon M5010 is a medium molecular weight high density polyethylene copolymer for use in blown film applications.

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	• High Density	• Medium Molecular Weight
Uses	• Film	

Physical	Nominal Value Unit	Test Method
Density	0.947 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR)	1.1 g/10 min	ASTM D1238

Films	Nominal Value Unit	Test Method
Film Thickness - Tested	64 µm	
Secant Modulus		ASTM E111
MD: 51 µm, Blown Film	717 MPa	
TD: 51 µm, Blown Film	910 MPa	
Tensile Strength		ASTM D882
MD: Yield, 51 µm, Blown Film	23.4 MPa	
TD: Yield, 51 µm, Blown Film	26.9 MPa	
MD: Break, 51 µm, Blown Film	48.3 MPa	
TD: Break, 51 µm, Blown Film	28.3 MPa	
Tensile Elongation		ASTM D882
MD: Break, 51 µm, Blown Film	700 %	
TD: Break, 51 µm, Blown Film	1000 %	
Elmendorf Tear Strength		ASTM D1922
MD: 51 µm, Blown Film	66 g	
TD: 51 µm, Blown Film	150 g	

Extrusion	Nominal Value Unit
Melt Temperature	199 to 210 °C

Extrusion Notes

2.2:1 Blow-up-ratio, 60 mil die gap

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.