Technical Data Sheet

Alathon L5045

High Density Polyethylene

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.

Regulatory Status

For regulatory compliance information, see *Alathon* L5045 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Bags & Pouches; Food Packaging Film; Lamination Film; Secondary Packaging
Market	Flexible Packaging
Processing Method	Blown Film
Attribute	General Purpose; Good Organoleptic Properties; High Density; Low Gel

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.45	g/10 min	0.45	g/10 min	ASTM D1238
Density, (23 °C)	0.950	g/cm³	0.950	g/cm³	ASTM D1505
Film					
Tensile Strength at Break					
MD	6250	psi	43.1	MPa	ASTM D882
TD	4420	psi	30.5	MPa	ASTM D882
Tensile Strength at Yield					
MD	3400	psi	23.4	MPa	ASTM D882
TD	3370	psi	23.2	MPa	ASTM D882
Tensile Elongation at Break					
MD	530	%	530	%	ASTM D882
TD	970	%	970	%	ASTM D882
Secant Modulus					
MD	101000	psi	695	MPa	ASTM D882
TD	132000	psi	910	MPa	ASTM D882
Elmendorf Tear Strength					
MD	40	g	40	g	ASTM D1922
TD	900	g	900	g	ASTM D1922

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

Data obtained from 2.0 mil film produced on a blown film line with a 60 mil die gap, 2.5:1 BUR, and 390-410 °F (199-210 °C) melt extrusion temperature.

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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