Technical Data Sheet

Alathon M5410

High Density Polyethylene

Product Description

Alathon M5410 is a medium molecular weight high density polyethylene copolymer for use in blown film applications.

Regulatory Status

For regulatory compliance information, see *Alathon* M5410 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial
Availability	North America
Application	Bags & Pouches; Barrier Film; Food Packaging Film; Lamination Film
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)	1.15	g/10 min	1.15	g/10 min	ASTM D1238
Density, (23 °C)	0.954	g/cm³	0.954	g/cm³	ASTM D1505
Film					
Tensile Strength at Break					
MD	5980	psi	41.2	MPa	ASTM D882
TD	6110	psi	42.1	MPa	ASTM D882
Tensile Strength at Yield					
MD	3780	psi	26.1	MPa	ASTM D882
TD	4510	psi	31.1	MPa	ASTM D882
Tensile Elongation at Break					
MD	750	%	750	%	ASTM D882
TD	920	%	920	%	ASTM D882
Secant Modulus					
MD	118000	psi	814	MPa	ASTM D882
TD	156000	psi	1080	MPa	ASTM D882
Elmendorf Tear Strength					
MD	60	g	60	g	ASTM D1922
TD	260	g	260	g	ASTM D1922

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

Notes

Data obtained from 2.5 mil film produced on a blown film line with a 60 mil die gap, 2.2:1 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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