

Alathon

# L5645

High Density Polyethylene

Film Extrusion Grade

Melt Index: 0.54

Density: 0.959

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## Applications

*Alathon* L5645 is a medium molecular weight, high density polyethylene homopolymer for use in blown film applications. Typical applications include general-purpose HDPE film applications such as overwrap, laminating base films, food packaging and oriented tapes.

## Regulatory Status

*Alathon* L5645 meets the requirements of the Food and Drug Administration regulation 21 CFR 177.1520. This regulation allows the use of this olefin polymer in "...articles or components of articles intended for use in contact with food..." Specific limitations or conditions of use may apply. Contact your Equistar product safety representative for more information.

## Processing Techniques

Specific recommendations for processing L5645 can only be made when the processing conditions, equipment and end use are known.

Typical Properties	Property	Nominal Value	Units	ASTM Test Method
	Melt Index	0.54	g/10 min	D1238
	Density	0.959	g/cc	D1505
<b>Film Properties at 2.0 mils</b>				
	Tensile Strength @ Yield, MD (TD)	4,000 (4,600)	psi	D882
	Tensile Strength @ Break, MD (TD)	7,600 (3,500)	psi	D882
	Elongation @ Break, MD (TD)	550 (500)	%	D882
	Secant Modulus, MD (TD)	137,000 (183,000)	psi	E111
	Elmendorf Tear Strength, MD (TD)	31 (1,700)	g	D1922

## Typical Extrusion Conditions:

2.0 mil Blown Film; 2.2:1 Blow-up-ratio, Melt Temperature 390-410°F (199-210°C), 60 mil die gap.

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