

Alathon

# L4903

High Density Polyethylene

HMW Film Grade

Melt Index 0.027 Density 0.949



## Applications

Alathon L4903 is a high molecular weight high density copolymer with broad bimodal molecular weight distribution. This resin exhibits excellent machine direction tear in an HMW-HD resin as well as low gel levels. Typical applications include trash can liners and products requiring incorporation of PCR.

## Regulatory Status

L4903 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..." Certain limitations or conditions of use may apply. Contact your Equistar product safety representative for more information.

## Processing Techniques

Specific recommendations for processing L4903 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	0.027	g/10 min	D1238
Density	0.949	g/cc	D1505
<b>Film Properties*</b>			
Dart Drop Impact Strength, F <sub>50</sub>	230	g	D1709
Elmendorf Tear Strength, MD (TD)	10 (60)	g	D1922
Tensile Strength @ Yield, MD (TD)	5,400 (4,100)	psi	D882
Tensile Strength @ Break, MD (TD)	11,600 (7,600)	psi	D822
Elongation @ Break, MD (TD)	330 (410)	%	D882
Secant Modulus, MD (TD)	144,000 (148,000)	psi	D882

**\*Data Obtained Under the Following Extrusion Conditions:**

Alpine 200 mm 3 Layer Die (40/35/25); 3 Extruders: 65 mm / 75 mm / 50 mm; Die Gap = 1.5 mm;  
Film Thickness = 0.5 mil; 500 lbs/ hr; Internal Bubble Cooling; Neck Height = 8 x DD; Blow Up Ratio = 4:1

These are typical values and not to be construed as specifications limits.

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