

Alathon

L4907

High Density Polyethylene

HMW Film Grade

Melt Index 0.075 Density 0.949



Applications

Alathon L4907 is a high molecular weight high density copolymer with broad bimodal molecular weight distribution. This resin exhibits high density and stiffness and is selected by customers for use in grooved feed and smooth bore equipment. Typical applications include merchandise bags, grocery sacks, roll stock and produce bags.

Regulatory Status

L4907 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 L4907 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 | 0.075 | g/10 min | D1238 |
| Density | 0.949 | g/cc | D1505 |
| Film Properties* | | | |
| Dart Drop Impact Strength, F ₅₀ | 260 | g | D1709 |
| Elmendorf Tear Strength, MD (TD) | 9 (97) | g | D1922 |
| Tensile Strength @ Yield, MD (TD) | 5,000 (4,100) | psi | D882 |
| Tensile Strength @ Break, MD (TD) | 11,900 (7,700) | psi | D822 |
| Elongation @ Break, MD (TD) | 320 (500) | % | D882 |
| Secant Modulus, MD (TD) | 138,000 (166,000) | 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.