

Alathon

# L4550

High Density Polyethylene

MMW Film Grade

Melt Index **0.45** Density **0.945**



## Applications

*Alathon* L4550 is a medium molecular weight high density copolymer with a narrow molecular weight distribution. L4550 inherently has very low gels and is used for monofilament, slit tape and high speed orientation processes. Typical applications include specialty films, packaging of agriculture products, protective netting for the agriculture and building industry, and netting for food applications.

## Regulatory Status

L4550 meets the requirements of the Food and Drug Administration regulation 21 CFR 177.1520. This regulation allows for, among other things, 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 sales representative for more information.

## Processing Techniques

Specific recommendations for processing L4550 can only be made when the processing conditions, equipment and end use are known. Contact your Equistar sales representative for more information.

## Typical Properties

| Property                     | Nominal Value | Units       | ASTM Test Method |
|------------------------------|---------------|-------------|------------------|
| Melt Index @ 2.16 Kg         | 0.45          | g/10 min    | D1238            |
| Melt Index @ 5 Kg            | 1.75          | g/10 min    | D1238            |
| Melt Index @ 21.6 Kg         | 20.3          | g/10 min    | D1238            |
| Density                      | 0.945         | g/cc D 1505 |                  |
| <b>Film Properties</b>       |               |             |                  |
| <b>2.0 mils</b>              |               |             |                  |
| Tensile Strength @ Yield, MD | 3,300         | psi         | D 882            |
| Tensile Strength @ Break, MD | 8,600         | psi         | D 882            |
| Elongation @ Break, MD       | 750           | %           | D 882            |
| Secant Modulus MD (1%)       | 99,400        | psi         | E 111            |

### Film 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

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