

**Preliminary
Data Sheet**

Starflex

GM1810BA

Metallocene Linear Low Density Polyethylene
Film Extrusion Grade

Melt Index 1.0 Base Resin Density 0.918

Applications

Starflex GM1810BA is a pelletized mLLDPE resin for use in applications that require maximum strength and toughness. GM1810BA contains a processing aid but does not contain slip or antiblock.

**Regulatory
Status**

GM1810BA meets the requirements of the Food and Drug Administration 21 CFR 177.1520. This regulation allows for, among other things, the use of this olefin polymer in " ...articles or components or 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**

Recommended processing conditions for GM1810BA are a 400° - 450°F melt temperature and a 1.5 to 3.0 blow-up ratio. Using proper techniques, these products can readily be drawn below 0.9 mils at optimum production rates. Specific recommendations for type of mLLDPE resin and extrusion conditions can only be made when the end use, required properties and extrusion equipment are provided; however, Equistar recommends that users conduct performance testing on finished articles in order to make an independent determination that GM1810BA is suitable and safe for all intended uses and applications. For further information, please contact your Equistar sales representative.

**Typical
Properties**

| Resin | Nominal Value | Units | ASTM Test Method |
|--|-----------------|----------|------------------|
| Melt Index (190/2.16) | 1.0 | g/10 min | D 1238 |
| Density | 0.918 | g/cc | D 1505 |
| Film | | | |
| Gauge | 0.75 | mil | |
| Blow-up Ratio | 2.5:1 | | |
| Haze | 12 | % | D 1003 |
| Gloss, 45° | 50 | units | D 2457 |
| Dart Drop Impact Strength, F ₅₀ | 1,100 | g | D 1709/A |
| Tensile Strength @ Break MD (TD) | 9,800 (8,600) | psi | D 882 |
| Elongation @ Break, MD (TD) | 470 (570) | % | D 882 |
| 1% Secant Modulus, MD (TD) | 27,000 (28,000) | psi | D 882 |
| Elmendorf Tear, MD (TD) | 150 (260) | g | D 1922 |

The values listed for physical properties are nominal values only and are subject to normal variations consistent with the test methods and/or variations found acceptable to the industry.

Additives

| | | |
|----------------|-----|-----|
| Slip | 0 | ppm |
| Antiblock | 0 | ppm |
| Processing Aid | Yes | |

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