

Alkamax® ML1810PS

Technical Data Sheet Metallocene Linear Low Density Polyethylene

DESCRIPTION

Alkamax ML1810PS is a metallocene linear low density polyethylene copolymer. This metallocene grade has excellent processability permitting higher production rates. It is designed for high performance film applications requiring maximum toughness and excellent sealing performance. Alkamax ML1810PS is formulated with a high slip level, process stabilisation, process aid and antiblocking additive.

APPLICATION

<u>Film Extrusion:</u> Alkamax ML1810PS is intended for applications requiring high performance polyethylene resins combined with low COF. Films produced with Alkamax ML1810PS have outstanding toughness, making this grade ideal for use in heavy duty applications or for downgauging existing film structures. In addition, the high performance sealing and hot tack properties of this grade combined with its excellent optical properties make it ideal for lamination and form, fill and seal films. It has been designed for processing on a wide range of blown film extrusion equipment. Addition of a UV stabiliser should be considered where the intended application involves intermittent to extended exposure to sunlight.

FOOD CONTACT / PRODUCT SAFETY

For food contact information please refer to the Regulatory Data Sheet at <u>genos.com</u>. For product safety information please refer to the Safety Data Sheet at <u>genos.com</u>.

| Polymer Properties | | Value ¹ | Units | Test Method |
|--|----------|--------------------|-------------------|-------------|
| Melt Index @ 190°C, 2.16 kg | | 1.0 | g/10 min | ASTM D1238 |
| Density ² | | 0.918 | g/cm ³ | ASTM D1505 |
| Film Properties ³ | | Value ¹ | Units | Test Method |
| Haze (10% LDPE blended) | | 13 | % | ASTM D1003 |
| Gloss, 45° (10% LDPE blended) | | 60 | GU | ASTM D2457 |
| Dart Drop Impact (F ₅₀) | | 1250 | g | ASTM D1709 |
| Tear Strength | MD TD | 5.7 6.5 | N N | ASTM D1922 |
| Tensile Strength at Yield ⁴ | MD TD | 11 11 | MPa MPa | ASTM D882 |
| Tensile Strength at Break ⁴ | MD TD | 39 34 | MPa MPa | ASTM D882 |
| Elongation at Break ⁴ | MD TD | 720 740 | % % | ASTM D882 |
| 2% Secant Modulus ⁵ | MD TD | 180 190 | MPa MPa | ASTM D882 |

- 1. Typical values not to be construed as specifications.
- 2. Base resin density; antiblock additive adds $0.001 0.002 \text{ g/cm}^3$.

TD

3. Film properties have been measured on 50 µm gauge film extruded at Qenos Gloucester line (2.8:1 blow-up ratio).

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- At 500 mm/min cross head speed.
- At 20 mm/min cross head speed.

For up to date information, refer to qenos.com

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