

Alcudia® Low density polyethylene

Chemicals

Technical data sheet



LDPE ALCUDIA® PE033

DESCRIPTION

ALCUDIA® PE033 is a low density polyethylene grade, produced by high pressure autoclave technology, suitable for blown or cast film applications. This material offers easy processability and good balance of mechanical and optical properties. It contains antioxidant additive.

TYPICAL APPLICATIONS

- General packaging film.
- Shrink film with high mechanical resistance.
- Heavy duty sacks.

Recommended melt temperature range from 190-220°C. Processing conditions should be optimised for each production line.

| PROPERTIES | VALUE | UNIT | TEST METHOD |
|---|------------|-------------------|-------------|
| General | | | |
| Melt Flow Rate (190°C, 2.16kg) | 0.3 | g/10 min | ISO 1133 |
| Density at 23°C | 921 | kg/m ³ | ISO 1183 |
| Film ⁽¹⁾ | | | |
| Dart drop (F ₅₀) | 900 | g | ISO 7765-1 |
| Tear resistance (Elmendorf) (MD/TD) | 750 / 1100 | cN | ISO 6383-2 |
| Tensile stress at break (MD/TD) | 20 / 19 | MPa | ISO 527-3 |
| Tensile stress at yield (MD/TD) | 10 / 10 | MPa | ISO 527-3 |
| Elongation at break (MD/TD) | 650 / 730 | % | ISO 527-3 |
| Coefficient of friction (Dynamic) | >0.4 | - | ISO 8295 |
| Gloss (45°) | 55 | - | ASTM D-2457 |
| Haze | 16 | % | ASTM D-1003 |
| Other | | | |
| Vicat softening temperature (load 10 N) | 93 | °C | ISO 306 |

(1) 200 µm thickness film, blow up ratio 2.25:1, frost line height 60 cm.

ALCUDIA® PE033 complies with the European Directives regarding materials intended for contact with foodstuffs. For further information, please contact our Technical Service and Development Laboratory or our Customer Care Service.

STORAGE

ALCUDIA® PE033 should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 60°C and protected from UV radiation. Storage under inappropriate conditions could initiate degradation processes which may have a negative influence on the processability and the properties of the transformed product.

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