# Alcudia®Low density polyethylene

Chemicals

Technical data sheet



## LDPE ALCUDIA® PE046/A

#### DESCRIPTION

ALCUDIA® PE046/A is a low density polyethylene grade, produced by high pressure autoclave technology, suitable for blown or cast film applications. This material offers easy processability, good balance of slip, mechanical and optical properties and excellent draw down. It contains slip and antiblock additives.

#### TYPICAL APPLICATIONS

- General packaging film.
- Film for lamination with adhesives.
- Lamination to different substrates (paper, aluminium foil, etc), with or without adhesives.
- High clarity, medium-high slip film.

Recommended melt temperature range from 150 to 180°C. Processing conditions should be optimised for each production line.

| PROPERTIES                              | VALUE     | UNIT              | TEST METHOD |
|---|-----------|-------------------|-------------|
|   |           |                   |             |
| General                                 |           |                   |             |
| Melt Flow Rate (190°C, 2.16kg)          | 2         | g/10 min          | ISO 1133    |
| Density at 23°C                         | 921       | kg/m <sup>3</sup> | ✓ISO 1183   |
| <b></b> (1)                             |           |                   |             |
| Film (1)                                |           |                   |             |
| Dart drop (F <sub>50</sub> )            | 90        | g                 | ISO 7765-1  |
| Tear resistance (Elmendorf) (MD/TD)     | 350 / 125 | cN                | ISO 6383-2  |
| Tensile stress at break (MD/TD)         | 25/ 20    | MPa 🥒             | ISO 527-3   |
| Tensile stress at yield (MD/TD)         | 10 / 10   | MPa               | ISO 527-3   |
| Elongation at break (MD/TD)             | 200 / 550 | %                 | ISO 527-3   |
| Coefficient of friction (Dynamic)       | <0.1      | - /               | ISO 8295    |
| Gloss (45°)                             | 55        | 4                 | ASTM D-2457 |
| Haze                                    | 10        | %                 | ASTM D-1003 |
|   |           |                   |             |
| Other                                   |           |                   |             |
| Vicat softening temperature (load 10 N) | 90        | °C                | ISO 306     |
|   |           |                   |             |

<sup>(1) 30</sup>  $\mu m$  thickness film, blow up ratio 2.25:1, frost line height 40 cm.

ALCUDIA® PE046/A 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® PE046/A 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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