

ALCUDIA® LDPE PE046

Low Density Polyethylene
REPSOL

PROSPECTOR®

www.ulprospector.com

Technical Data

Product 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.

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English)
Search for UL Yellow Card	• REPSOL
Availability	• Europe • North America
Additive	• Antiblock • Slip
Features	• Antiblocking • Good Optical Properties • Food Contact Acceptable • Good Processability • Slip • Good Drawdown • High Clarity
Uses	• Cast Film • Laminates • Film • Packaging
Agency Ratings	• EU Food Contact, Unspecified Rating
Processing Method	• Blown Film • Cast Film

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density (73°F (23°C))	0.921 g/cm ³	0.921 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Coefficient of Friction vs. Itself - Dynamic, Blown Film	< 0.10	< 0.10	ISO 8295

Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	1.2 mil	30 µm	
Tensile Stress			ISO 527-3
MD : Yield, 1.2 mil (30 µm), Blown Film	1450 psi	10.0 MPa	
TD : Yield, 1.2 mil (30 µm), Blown Film	1450 psi	10.0 MPa	
MD : Break, 1.2 mil (30 µm), Blown Film	3630 psi	25.0 MPa	
TD : Break, 1.2 mil (30 µm), Blown Film	2900 psi	20.0 MPa	
Tensile Elongation			ISO 527-3
MD : Break, 1.2 mil (30 µm), Blown Film	200 %	200 %	
TD : Break, 1.2 mil (30 µm), Blown Film	550 %	550 %	
Dart Drop Impact			ISO 7765-1
1.2 mil (30 µm), Blown Film	90 g	90 g	
Elmendorf Tear Strength			ISO 6383-2
MD : 1.2 mil (30 µm), Blown Film	0.79 lbf	3.5 N	
TD : 1.2 mil (30 µm), Blown Film	0.28 lbf	1.3 N	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	194 °F	90.0 °C	ISO 306/A

Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 1.18 mil (30.0 µm), Blown Film)	55	55	ASTM D2457
Haze (1.18 mil (30.0 µm), Blown Film)	10 %	10 %	ASTM D1003

1 of 2

Form No. TDS-71503-en



UL and the UL logo are trademarks of UL LLC © 2016. All Rights Reserved.
UL Prospector | 800-788-4668 or 307-742-9227 | www.ulprospector.com.

Document Created: Monday, August 1, 2016
Added to Prospector: December 2003
Last Updated: 5/14/2012

The information presented on this datasheet was acquired by UL Prospector from the producer of the material. UL Prospector makes substantial efforts to assure the accuracy of this data. However, UL Prospector assumes no responsibility for the data values and strongly encourages that upon final material selection, data points are validated with the material supplier.

ALCUDIA® LDPE PE046

Low Density Polyethylene

REPSOL

PROSPECTOR®

www.ulprospector.com

Additional Information

Data taken from 30 µm thickness film, blow up ratio 2.25:1, frost line height 40 cm.

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	302 to 356 °F	150 to 180 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

