TECHNICAL DATA SHEET

Repsol Alcudia® PE003

The grade REPSOL ALCUDIA PE003 is a low density polyethylene grade, produced by high pressure autoclave technology, for blown or cast film applications. This material offers easy processability and good balance of mechanical and optical properties. It does not contain any additives.

Applications:

- Thin shrink film
- Heavy duty sacks
- Lamination to different substrates (paper, aluminium foil, etc), with or without adhesive

Recommended melt temperature range from 150 to 180ºC. Processing conditions should be optimized for each production line.

Properties:

Properties	Value	Unit	Test Method
General			
Melt Flow Rate (190ºC, 2.16 kg)	2.4	g/10 min	ISO 1133
Density at 23ºC	920	kg/m^3	ISO 1183
Film (1)			
Dart Drop (F_{50})	90	g	ISO 7765-1
Tear Resistance (Elmendorf) (MD/TD)	300/125	cN	ISO 6383-2
Tensile Stress at Break (MD/TD)	29/20	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)	>0.5	-	ISO 8295
Gloss (45º)	60	-	ASTM D-2457
Haze	8	%	ASTM D-1003
Other			
Vicat Softening Temperature (load 10N)	91	ºC	ISO 306

(1) 30 µm thickness film, blow up ratio 2.25:1, frost line height 40 cm.

This information is offered in good faith and meant only as a guide. The transformer or user will be, in each case, responsible for the processing conditions and the final use of the product. Freedom under patents, copyright and registered designs cannot be assumed.

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Storage:

The grade REPSOL ALCUDIA PE003 should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 50ºC and protected from UV radiation. Storage under inappropriate conditions could initiate degradation processes or undesired migration of additives included in its formulation which may have a negative influence on the processability and properties of the transformed product.

Disclaimer:

This grade complies with the European regulations for materials for use in food contact. This grade is not intended to be used in medical, pharmaceutical, or healthcare applications, therefore Repsol does not authorize its use in them.

Repsol does not grant express or implicit guarantees that extend beyond the description contained herein. Nothing herein shall constitute any guarantee of merchantability or fitness for a particular purpose. Before using a product sold by Repsol, users must make their own independent determination that the product is safe, legal, and technically suitable for its intended use. Repsol does not assume any responsibility for the use of its materials together with other materials.

Related documents:

The following related documents are available on request, and represent various aspects on the usability and safety of the product:

- Safety data sheet.
- Statement on compliance with food contact regulations.

Recommended consumption period: 12 months from the date of delivery to the customer.

March 2026

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