

Technical data sheet

Chemicals



LDPE 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 180°C. Processing conditions should be optimised for each production line.

PROPERTIES	VALUE	UNIT	TEST METHOD
General			
Melt Flow Rate (190°C, 2.16kg)	2.3	g/10 min	ISO 1133
Density at 23°C	920	kg/m ³	ISO 1183
Mechanical			
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	>0.5	-	ISO 8295
Gloss (45°)	60	%	ASTM D-2457
Haze	8	%	ASTM D-1003
Others			
Vicat softening temperature (load 10 N)	91	°C	ISO 306

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

The grade REPSOL ALCUDIA PE003 complies with the European Directives regarding materials intended for contact with foodstuffs. The product mentioned herein is not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications. For further information, please contact our Technical Service and Development Laboratory or our Customer Care Service.

Storage

The grade REPSOL ALCUDIA PE003 should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 50°C 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.

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