TECHNICAL DATA SHEET

Repsol Alcudia® R4805D1

RESPOL ALCUDIA R4805D1 is a low melt flow rate high density polyethylene with medium molecular weight distribution. It offers an optimum balance between mechanical and processing properties for production of tapes with high tensile strength at break. This product is specially formulated with a slip package.

Applications:

RESPOL ALCUDIA R4805D1 is designed for stretched tapes production based on blown film. It gives flexible tapes with high tenacity and low fibrillation tendency suitable for high-speed textile lines:

- Iso Mayer textile applications.
- Raschel knitted and woven fabrics.
- Twines and ropes.

Recommended melt temperature range from 210 to 230ºC. Processing conditions should be optimized for each production line.

Properties:

Properties	Value	Unit	Test Method
General			
Melt Flow Rate (190ºC, 2.16 kg)	0.55	g/10 min	ISO 1133
Density at 23ºC	948	kg/m^3	ISO 1183
Mechanical			
Tensile Strength at Yield	25	MPa	ISO 527-2
Tensile Strength at Break	38	MPa	ISO 527-2
Elongation at Yield	9	%	ISO 527-2
Elongation at break	1100	%	ISO 527-2
Flexural modulus of elasticity	1100	MPa	ISO 178
Procesing guidelines			
Temperature	180-230	ºC	
Blow ratio	1.1-1.3		

(1) Should be processed on HD-extruders in order to obtain optimal performance and good mechanical properties of the film.

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:

RESPOL ALCUDIA R4805D1 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 the 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.

April 2026

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