TECHNICAL DATA SHEET

Repsol Isplen® PB154M1F

The grade REPSOL ISPLEN PB154M1F is a phthalate free heterophasic propylene copolymer, especially designed for cast film applications, where high impact strength even at low temperatures is required. It is suitable for the manufacturing of non-oriented films with high tear strength. REPSOL ISPLEN PB154M1F provides the film with lower haze than conventional heterophasic copolymers.

This grade is formulated with slip (1700 ppm) and antiblocking (1700 ppm) agents to provide the film with the best processability in high-speed transformation equipment.

Applications:

Non oriented film extrusion where high impact and tear strength are essential:

- Single layer films / Core-layer in co-extruded cast films
- Packaging of foodstuffs and non-food stuffs

Recommended melt temperature range from 190 to 250°C. Processing conditions should be optimized for each production line.

Properties:

Properties	Value	Unit	Test Method
General			
Melt flow rate (230°C, 2.16 kg)	7	g/10 min	ISO 1133
Density at 23°C	905	kg/m^3	ISO 1183
Mechanical			
Flexural Modulus	1100	MPa	ISO 178
Charpy impact strength (23°C, notched)	15	kJ/m^2	ISO 179
Dard Impact (-20°C). Test sample thickness 1 mm			
Energy	9.5	J	ISO 6603
Maximal force	1790	N	ISO 6603
Thermal			
HDT 0.45 MPa	82	°C	ISO 75
Film (1)			
Tensile Strength at yield MD	17	MPa	ASTM D882
Tensile Strength at break MD	34	MPa	ADTM D882
Tear strength	95	cN	ISO 6383/2
Gloss 60°	43	GU	ASTM D2457
Haze	22	%	ASTM D1003

(1) 50 µm film thickness, blow up ratio 2.5:1

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:

REPSOL ISPLEN PB154M1F should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 60ºC 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.

May 2026

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