TECHNICAL DATA SHEET

Repsol Isplen® PB176N4M

REPSOL ISPLEN PB176N4M is a phthalate free nucleated heterophasic copolymer. It combines the impact strength of a conventional copolymer with the high stiffness level of homopolymers, as well as excellent processability. At the same time, it exhibits a higher crystallisation temperature and a low shrinkage tendency.

REPSOL ISPLEN PB176N4M clearly outperforms standard products and allows the same application performance with a potential cost reduction for finished articles due to:

- Potential reduction of wall thickness.
- Shorter cooling time: higher mould opening temperatures.
- Can replace mineral filled or blends among polypropylenes.

Applications:

REPSOL ISPLEN PB176N4M performance profile expands the final application to broad and diverse goods: packaging (cylindrical containers for paints, leisure chemicals, pool maintenance products, food rounded containers, baskets, garden furniture, flowerpots, toys, trays and technical items for domestic appliances or automotive industries).

Recommended melt temperature range from 190 to 250ºC. Processing conditions should be optimised for each production line.

Properties:

Properties	Value	Unit	Test Method
General			
Melt Flow Rate (230ºC/2.16 kg)	15	g/10 min	ISO 1133
Density at 23ºC	905	kg/m^3	ISO 1183
Mechanical			
Flexural Modulus of Elasticity	1600	MPa	ISO 178
Charpy Impact Strength (23ºC, notched)	6	kJ/m^2	ISO 179
Thermal			
HDT 0.45 MPa	100	ºC	ISO 75
Others			
Shore Hardness	66	-	ISO 868

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 PB176N4M 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.

June 2026

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