

## Moplen EP547U

## **Product description**

Moplen EP547U is the polypropylene block copolymer manufactured by PMC under the license of Lyondellbasell using the Spheripol process. Moplen EP547U is a very high fludity block copolymer with antistatic agent, suitable for thin-walled injection molding. Typical customer applications are margarine tubs, packing for daily products, ice aream containers, lids, housewares, toy boxes and laundry baskets. Moplen EP547U resin meets the FDA requirements in the Code of Federal Regulations in 21 CFR 177.1520 for food contact.

## **Product characteristics**

Processing method TWIM/ Injection molding

Features High flowability/ Optimized balance of stiffness & impact/ Low warpage/ Antistatic/ Odorless

Typical application TWIM/Food containers/Appliance

Typical properties	Method	Value	Unit
Melt Flow Rate (230 °C,2.16kg)	ISO 1133	70	g/10 min
Density	ISO 1183	0.9	g/cm³
Tensile Modulus (23°C, v = 1 mm/min, Secant)	ISO 527-1,-2	1500	MPa
Charpy impact strength, Unnotched(23°C)	ISO 179/1eU	84	kJ/m²
Charpy impact strength, Unnotched(0°C)	ISO 179/1eU	55	kJ/m²
Charpy impact strength, Unnotched(-20 °C)	ISO 179/1eU	54	kJ/m²
Charpy impact strength, Notched(23°C)	ISO 179/1eA	4	kJ/m²
Charpy impact strength, Notched(0°C)	ISO 179/1eA	3.4	kJ/m²
Charpy impact strength, Notched(-20°C)	ISO 179/1eA	2.8	kJ/m²
Vicat softening temperature (VST/A/50 K/h (10N))	ISO 306	149	°C
HDT B (0.45 MPa) Unannealed	ISO 75B-1,-2	100	°C

<sup>1)</sup> The above values are for reference only and shall not be construed as specifications.

## 3) POLYMIRAE MAKES NO WARRANTY, EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) UNLESS AGREED OTHERWISE IN A CONTRACT.

- 4) The use of this product(s) is strictly prohibited in
  - (i) U.S. FDA Class III, Health Canada Class IV, and/or European Union Class III Medical Devices;
  - (ii) applications involving permanent implantation into the body;
  - (iii) life-sustaining medical applications; or
  - (iv) lead, asbestos or MTBE related applications.

Users are solely liable for any injuries or damages resulting from any use of this product(s) in the above categories and Seller shall have no liability whatsoever.

- 5) The use of this product is further prohibited in the following categories unless Seller receives a prior notice of each specific application using such product, provided that Seller may refuse to sell such product at its sole discretion.
  - (i) U.S. FDA Class I, Health Canada Class I, and/or European Union Class I medical devices;
  - (ii) U.S. FDA Class II, Health Canada Class II or Class III, and/or European Union Class II Medical Devices;
  - (iii) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned Medical Devices:
  - (iv) packaging in direct contact with an active pharmaceutical ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration;
  - (v) tobacco related products and applications;
  - (vi) electronic cigarettes and similar devices; or
  - (vii) pressure pipe or fittings that are considered a part or component of a nuclear reactor

<sup>2)</sup> Before using a PolyMirae product, users shall review carefully Seller's instructions for the use of such product and make their own independent determination of whether the product is suitable for the intended use and can be used safely and legally. If users fail to comply with Seller's restrictions and instructions for the use of the product or an obligation to notify Seller, if applicable, of each specific application before using such product in certain categories of application, users are solely liable for any injuries or damages resulting from their use of such product and Seller shall have no liability whatsoever.

- \* All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.
- 6) For the purpose of this Disclaimer, "Seller" shall mean PolyMirae and any person or entity appointed by PolyMirae for the sale of the product covered by this Disclaimer.

Moplen is a trademark owned or used by the LyondellBasell family of companies and it is used by Polymirae under license.