

NINPOL[®]PI020

Impact Copolymer Polypropylene

Melt Flow: 2

Density: 0.902

VINPOL PI020 is a copolymer polypropylene with an advanced nucleator technology formulation. It is designed for extrusion blowmolding processes. EBM bottles made from this product will have excellent gloss and low haze. *This product is FDA compliant. **This product complies with applicable EU food-contact legislation.

| Resin Property* | Typical Value | Units | Test Method |
|--|---------------|-------------------|-------------|
| Melt Flow (230°C/2.16 kg) | 2 | g/10 min | ASTM D-1238 |
| Density | 0.902 | g/cm ³ | ASTM D-792 |
| Tensile Strength at Yield, 50 mm/min | 3,850 (26.5) | psi (MPa) | ASTM D-638 |
| Tensile Elongation at Yield | 13.5 | % | ASTM D-638 |
| Flexural Modulus, 1% Secant, 1 mm/min, Procedure A | 140,000 (964) | psi (MPa) | ASTM D-790 |
| Notched Izod Impact Strength, 73°F (23°C) | 8 (425) | ft-lb/in (J/m) | ASTM D-256A |
| DTUL @ 66 psi, Unannealed | 194 (90) | °F (°C) | ASTM D-648 |

*The base resin in this product complies with 21 CFR 177.1520(a) (3) (i) and (c) 3.1a and 3.2a. In addition, all other ingredients used in this product meet the requirements of their respective FDA regulations and 21 CFR 177.1520(b), subject to no limitations on temperature or food type contacted. Accordingly, this product can be used in contact with all food types listed in 21 CFR 176.170(c), Table 1, under Conditions of use A through H, identified in 21 CFR 176.170(c), Table 2

*This product complies with applicable European Union (EU) food-contact legislation, including the EU regulation (EU) No 10/2011, as amended, when used in food packaging applications, subject to the following conditions and limitations:

All monomers and additives used in this product are included in the positive lists of the EU regulation (EU) No 10/, as amended. Two additives used in the product are subject to a specific migration limit (SML). Information on the applicable SML will be supplied upon request. It is the responsibility of the manufacturer of the finished food-contact article to verify compliance of the finished article with applicable EU legislation, including the SML noted above, as well as the overall migration limit. In addition, it is the responsibility of the manufacturer of the finished article to verify that their final article, made according to good manufacturing practices (GMPs), does not modify the organoleptic properties of the food. Provided that the above limitations are met in the finished article, the product complies with applicable EU law, including Article 3 of the Framework Regulation 1935/2004/EC, and the EU regulation (EU) No 10/2011, as amended.

Vinmar Polymers America cannot anticipate or control the many different conditions under which this information and/or product may be used. It does not guarantee the applicability or the accuracy of this information or the suitability of its products in any given situation. User of the material should make their own tests to determine the suitability of each such product for their particular purposes. The data listed herein falls within the normal range of product properties, but they should not be used to establish specification limits or used alone as the basis of design.