

# HD1010J

High Density Polyethylene Resin

**Special Characteristics** : InnoPlus HD1010J is high density polyethylene injection molding grade. They are tailored with very narrow molecular weight distribution (MWD) and high flow ability. They have optimum strength property and exhibits excellent organoleptic properties which prevent unpleasant odor and taste from cap or closure to transfer to water.

**Typical Applications** : Toys, Auto parts, Household products, masterbatch carrier and Beverage spout caps.

## Typical Properties :

| Properties                                       | HD1010J       | Unit               | Test Method |
|--|---------------|--------------------|-------------|
| <i><u>Physical Properties</u></i>                |               |                    |             |
| Melt Flow Rate (2.16 kg/190°C)                   | 20            | g/10 min           | ASTM D1238  |
| Density  | 0.956         | g/cm <sup>3</sup>  | ASTM D1505  |
| Vicat Softening Point @ 10 N, 50 °C/hr           | 122           | °C                 | ASTM D1525  |
| Melting Point                                    | 131           | °C                 | ASTM D3418  |
| <i><u>Mechanical Properties</u></i>              |               |                    |             |
| Tensile Strength @ Yield                         | 290           | kg/cm <sup>2</sup> | ASTM D638   |
| Tensile Strength @ Break                         | 140           | kg/cm <sup>2</sup> | ASTM D638   |
| Elongation @ Break                               | 200           | %                  | ASTM D638   |
| Flexural Modulus                                 | 11300         | kg/cm <sup>2</sup> | ASTM D790   |
| Notched Izod Impact Strength                     | 4 (C)*        | kg.cm/cm           | ASTM D256   |
| Durometer Hardness                               | 64            | Shore D            | ASTM D2240  |
| ESCR, F <sub>50</sub> (Condition B, 25 % Igepal) | Initial Break | hrs                | ASTM D1693  |

\* C = Complete Break

**Note** : Properties reported here are typical values of the product, not to be considered as specifications.

PTT Global Chemical makes no representations as to the accuracy or completeness of the information contained herein.

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## Processing Condition :

Extruder temperature : 165 - 190 °C

Nozzle temperature : 180 - 195 °C

## FDA Statement :

HDPE under the brand InnoPlus complies with U.S. FDA 21 CFR 177.1520 regulation for polyethylene used in articles that contact food except for articles used for packaging or holding food during cooking.

## Disclaimer :

This Applications specified herein is for reference only and not suitable for using in the manufacturing of any products in medical and pharmaceutical sectors.

- Determination of suitability of the product for the use and purpose shall be the customer's responsibility. Customer is obligated to inspect and test the product for such suitability. Customer is responsible for appropriate, safe, legal use processing and handling of the product.
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