

# HD1100J / HD1600J

High Density Polyethylene Resin

**Special Characteristics :** InnoPlus HD1100J and HD1600J are high density polyethylene injection molding grade. They are tailored with narrow molecular weight distribution (MWD) and high flow ability. They have optimum strength property which used for general part, auto part, toy and house ware.

**Typical Applications :** Toys, Auto parts, Household products

## Typical Properties :

Properties	Typical Value		Unit	Test Method
	HD1100J	HD1600J		
<i>Physical Properties</i>				
Melt Flow Rate (190 °C, 2.16 kg)	18	12	g/10 min	ASTM D1238
Density	0.958	0.958	g/cm <sup>3</sup>	ASTM D1505
Vicat Softening Point @ 10 N, 50 °C/hr	116	118	°C	ASTM D1525
Melting Point	128	129	°C	ASTM D3418
<i>Mechanical Properties</i>				
Tensile Strength @ Yield	300	280	kg/cm <sup>2</sup>	ASTM D638
Tensile Strength @ Break	150	150	kg/cm <sup>2</sup>	ASTM D638
Elongation @ Break	60	210	%	ASTM D638
Stiffness	10000	9000	kg/cm <sup>2</sup>	ASTM D747
Flexural Modulus	12500	13500	kg/cm <sup>2</sup>	ASTM D790
Notched Izod Impact Strength	4 (C)*	3 (C)*	kg.cm/cm	ASTM D256
Durometer Hardness	64	64	Shore D	ASTM D2240
ESCR, F <sub>50</sub> (condition B, 25 % Igepal)	Initial Break	Initial Break	hrs	ASTM D1693

## Processing Condition :

Extruder temperature : 165 - 190 °C

Nozzle temperature : 180 - 195 °C

\* C = Complete Break

## 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.

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

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