

InnoPlus HD1100J

High Density Polyethylene

PTT Chemical Public Company Limited



Prospector

Product Description

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.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific		
Features	• Food Contact Acceptable • Good Strength	• High Flow • Narrow Molecular Weight Distribution	
Uses	• Automotive Applications	• General Purpose	• Household Goods
Agency Ratings	• FDA 21 CFR 177.1520		
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density	0.958 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	18 g/10 min	ASTM D1238
ESCR - condition B, 25% Igepal, F50	Initial Break	

Mechanical	Nominal Value Unit	Test Method
Tensile Strength		ASTM D638
Yield	29.4 MPa	
Break	22.6 MPa	
Tensile Elongation (Break)	60 %	ASTM D638
Apparent Bending Modulus	981 MPa	ASTM D747
Flexural Modulus	1230 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact ²	39 J/m	ASTM D256

Hardness	Nominal Value Unit	Test Method
Durometer Hardness (Shore D)	64	ASTM D2240

Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature	116 °C	ASTM D1525 ³
Melting Temperature	128 °C	ASTM D2117

Injection	Nominal Value Unit
Rear Temperature	165 to 190 °C
Middle Temperature	165 to 190 °C
Front Temperature	165 to 190 °C
Nozzle Temperature	180 to 195 °C

Notes

¹ Typical properties: these are not to be construed as specifications.

² Complete break

³ Rate A (50°C/h), Loading 1 (10 N)