

HD5001S

High Density Polyethylene Resin

Product Descriptions

InnoPlus HD5001S is high density polyethylene resin which offers excellent thermal stability for high temperature condition, good balance of processability, excellent tenacity and high production rates. InnoPlus HD5001S is recommended for monofilament or yarn applications.

Typical Applications : Rope, Fishing net, Agricultural net, Tarpaulin, Woven sack

Typical Properties :

Properties	Value	Unit	Method
<i><u>Physical Properties</u></i>			
Melt Flow Rate (2.16 kg/190 °C)	0.8	g/10 min	ASTM D1238
Density	0.954	g/cm ³	ASTM D1505
Vicat Softening Point @ 10 N, 50 °C/hr	125	°C	ASTM D1525
Melting Point	125	°C	ASTM D3418
<i><u>Mechanical Properties</u></i>			
Tensile Strength @ Yield	290	kg/cm ²	ASTM D638
Tensile Strength @ Break	390	kg/cm ²	ASTM D638
Elongation @ Break	>1000	%	ASTM D638
Stiffness	8500	kg/cm ²	ASTM D747
Flexural Modulus	12000	kg/cm ²	ASTM D790
Notched Izod Impact	17 (P)*	kg.cm/cm	ASTM D256
Durometer Hardness	64	Shore D	ASTM D2240
ESCR, F ₅₀ (Condition B, 25 % Igepal)	30	hrs	ASTM D1693

* P = Partial Break

Recommendation :

Extruder temperature : 200 - 260 °C
Die temperature : 250 - 260 °C

Stretching temperature : 97 - 100 °C
Stretching ratio : 8 - 10

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.