

HD5000S

High Density Polyethylene Resin

Special Characteristics : InnoPlus HD5000S is high density polyethylene resin which offers good balance of processability, high production rates, excellent tenacity and good appearance. InnoPlus HD5000S is recommended for mono-filament or yarn applications

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

Typical Properties :

Properties	HD5000S	Unit	Test Method
<i><u>Physical Properties</u></i>			
Melt Flow Rate (190 °C, 2.16 kg)	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 (Based on compression specimens)</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 Strength	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

Processing Condition :

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.

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.