



HD4000F

High Density Polyethylene Resin

Special Characteristics: InnoPlus HD4000F is high density polyethylene resin which is produced by slurry process, a technology licensed by Mitsui. InnoPlus HD4000F offers good processability, low gel content, high melt strength and good stiffness. This grade is recommended for lamination film, stand-up pouch bag and high quality film of packaging.

Typical Applications: Laminated film, Laminated Tube, Stand-up pouch bag, Heavy duty bag, General purpose film for packaging **Typical Properties**:

Properties	HD4000F	Unit	Test Method
Physical Properties			
Melt Flow Rate (190 °C, 2.16 kg)	0.7	g/10 min	ASTM D1238
Density	0.966	g/cm ³	ASTM D1505
Vicat Softening Point	125	°C	ASTM D1525
Melting Temperature	135	$^{\circ}\mathrm{C}$	ASTM D3418
Mechanical Properties (Based on blown film)			
Tensile Strength at Break (MD/TD)	55/34	MPa	ASTM D882
Elongation at Break (MD/TD)	515/3	%	ASTM D882
Tensile Modulus, 2% Secant (MD/TD)	690/920	MPa	ASTM D882
Dart Impact Strength	<62	g	ASTM D1709
Tear Strength (MD/TD)	10/800	g	ASTM D1922
Haze	64	%	ASTM D1003
Gloss (45°)	8	-	ASTM D2457

^{*} Film made on blown film line at blow up ratio 5.0. film properties obtained from 25 microns film.

Recommendation:

Extruder temperature : 160 - 180 $^{\circ}$ C Die temperature : 180 - 210 $^{\circ}$ C

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

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