

# LDPE

Low Density Polyethylene



Low Density Polyethylene (LDPE) under the brand of InnoPlus, is produced by PTT Global Chemical Public Company Limited (PTTGC).  
The capacity for LDPE production is 300,000 MTA.



InnoPlus LDPE is produced by high pressure tubular process, a technology licensed by LyondellBasell. The technology can provide the wide range of LDPE products. InnoPlus LDPE is easy to process and has an adequate balance between optical and mechanical properties. InnoPlus LDPE is widely used in manufacturing for various kind of segment such as heavy duty film, packaging film, zip bag, general purpose film, shrink film, small blow molding container and wire & cable application.



Physical Properties*	Test Method	Unit	Grade							
			LD2420D <sup>(1)</sup>	LD2420F <sup>(2)</sup>	LD2426F <sup>(2)</sup>	LD2420H <sup>(2)</sup>	LD2426H <sup>(2)</sup>	LD2420K <sup>(2)</sup>	LD2426K <sup>(2)</sup>	LD2026K <sup>(2)</sup>
MFR 190°C, 2.16 kg	ISO 1133	g/10 min	0.27	0.75	0.75	1.9	1.9	4	4	4
Density	IOS 1183	g/cm <sup>3</sup>	0.922	0.922	0.922	0.924	0.924	0.924	0.924	0.920
Melting Temperature	ISO 11357	°C	112	112	111	110	110	110	110	109
Vicat Softening Point	ASTM D1525	°C	96	94	94	93	93	93	93	86
<b>Film Properties**</b>										
Haze	ASTM D1003	%	8	6	8	6	7	7	8	6
Gloss (20°)	ASTM D2457	-	50	60	50	80	80	90	80	70
Dart Drop Impact	ASTM D1709	g	220	170	110	140	150	130	120	120
Max. Tensile Strength (MD)	ISO 527	Mpa	28	25	22	23	23	20	20	19
Max. Tensile Strength (TD)	ISO 527	Mpa	27	23	20	20	20	18	18	17
Ultimate Elongation (MD)	ISO 527	%	450	400	300	500	500	560	560	560
Ultimate Elongation (TD)	ISO 527	%	700	700	600	700	700	700	630	700
Special Feature			-	-	Slip & Antiblock	-	Slip & Antiblock	-	Slip & Antiblock	Slip & Antiblock
Application	Heavy Duty Films, Agriculture Films, Shrink Films, Tubes and Small Extrusion Blow Molding Containers					General Purpose Films, Zip Bags, Foams and Air Bubble Films				

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.



Physical Properties*	Test Method	Unit	Grade
			LD2020H
MFR 190°C, 2.16 kg	ISO 1133	g/10 min	2
Density	ISO 1183	g/cm <sup>3</sup>	0.919
Melting Temperature	ISO 11357	°C	109
Vicat Softening Point	ASTM D1525	°C	89
Tensile Strength at Yield	ASTM D638	Mpa	10
Tensile Strength at Break	ASTM D638	Mpa	14
Elongation at Break	ASTM D638	Mpa	500
Secant Modulus	ASTM D638	Mpa	200
Hardness	ISO 868	Shore D	44
Volume Resistivity (500V)	ASTM D257	ohm.cm	6.0E +16
Dielectric Strength (500V/sec)	ASTM D149	kV/mm	>45
Dielectric Constant (60 Hz)	ASTM D150	-	2.2
Dissipation Factor (60 Hz)	ASTM D150	-	0.001
Application	Medium voltage powder cable insulation and jacketing		

\* Data based on pellets and press-molded sheet.

\*\* Data based on blown film;  
MD : Machine Direction.  
TD : Transverse Direction.

Note : (1) Film properties tested using 70 microns thickness blown film extruded at blow-up ratio of 2.5 and 35 kg/hr output rate.

(2) Film properties tested using 50 microns thickness blown film extruded at blow-up ratio of 2.5 and 35 kg/hr output rate.

Typical values; not to be construed as specification.

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