

Lamination Film

The multilayer films which produced by lamination process are combined between at least 2 substrates to promote the film functions e.g., mechanical properties, barrier properties and seal ability. Lamination film are comprised of LDPE, LLDPE and HDPE which suitable for food, personal care and home care packaging.



Personal Care Packaging



Home Care Packaging



Frozen & Chilled Foods Packaging



Dry Foods Packaging



Instant Foods Packaging



Foods & Beverages Pouch



Seasoning & Sauce Sachet



Recommendation

	LDPE	InnoPlus: LD2420H, LD2426H, LD2420K, LD2426K
	LLDPE	InnoPlus: LL7410A, LL7410D, LL7410D1, LL7410G1, LL7410D2, LL7610A, LL7610D1
	mLLDPE	InnoPlus: LL7810A, LL7810D, LL7820D, LL7910A, LL7910D, LL7903A, LL7905AM, LL7905AO, LL7810D2V, LL7810AV, LL7810AW
	HDPE	InnoPlus: HD3355F, HD4000F

General Film Packaging (Non-Lamination)

General purpose film are comprised of LDPE, LLDPE, HDPE and Bioplastics and suitable for general packing products such as Zipper bags, Bubble film, Garbage bags, Shopping bags, Frozen & Chilled bags and Dry food packaging.



Frozen & Chilled Foods Packaging



Dry Foods Packaging



Zipper Bags



Bubble Film



Garbage Bags



Glove PE



Shopping Bags



Liner Bags



Recommendation

	LDPE	InnoPlus: LD2420H, LD2426H, LD2420K, LD2426K
	LLDPE	InnoPlus: LL7410A, LL7410D, LL7410D1, LL7410G1, LL7410D2, LL7420A, LL7420D, LL7420D1, LL7610A, LL7610D1
	mLLDPE	InnoPlus: LL7810A, LL7810D, LL7910A, LL7910D, LL7903A, LL7905AM, LL7905AO, LL7810D2V, LL7810AV, LL7810AW
	HDPE	InnoPlus: HD6000F, HD7000F, HD3355F, HD4000F
	PCR-LDPE	InnoEco: D021NF-50
	Bioplastics Compound	PlastMate: PB05001F

HDPE

High Density Polyethylene

InnoPlus: HDPE						
Properties	Test Method	Unit	Grade			
			HD6000F	HD7000F	HD3355F	HD4000F
MFR (190 °C, 2.16 kg)	ASTM D1238	g/10 min	0.16	0.05	1.1	0.7
Density	ASTM D1505	g/cm ³	0.956	0.956	0.951	0.966
Melting Temperature	ASTM D3418	°C	135	135	131	
Tensile Strength at Yield	ASTM D638	kg/cm ²	260	300	240	-
Tensile Strength at Break	ASTM D638	kg/cm ²	370	390	370	-
	ASTM D882	MPa (MD/TD)	-	-	-	48/22
Elongation at Break	ASTM D638	%	950	820	>1,000	-
	ASTM D882	% (MD/TD)	-	-	-	630/3
Flexural Modulus	ASTM D790	kg/cm ²	11,000	12,000	11,000	-
Tensile Modulus, 1% Secant	ASTM D882	MPa	-	-	-	>1,000
Notched Izod Impact Strength	ASTM D256	kg.cm/cm	27 (NB*)	30 (NB*)	14	-
Durometer Hardness	ASTM D2240	shore D	65	64	62	-
Vicat Softening Point	ASTM D1525	°C	125	125	122	125
ESCR; 25% Igepal, F ₅₀	ASTM D1693	Hours	>500	>2,000	25	-
Dart Impact Strength	ASTM D1709	g	-	-	-	<63
Tear Strength (MD/TD)	PEG 701	g	-	-	-	10/620
Haze	ASTM D1003	%	-	-	-	64
Gloss (45°)	ASTM D2457	-	-	-	-	8
End Product			General purpose bags, Shopping bags, Linear Films, Bags on roll, Garbage bags, Industrial films		Laminated films, Laminated Tubes, General purpose films	-

Note: *NB = Non Break

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. All above values are typical values, not to be construed as specification.

Automotive Parts



InnoPlus: HDPE					
Properties	Test Method	Unit	Film	Thermoform	Blow Molding/Thermoform
			HD6000F	HD7000H	HD7800B
MFR (190 °C, 2.16 kg)	ASTM D1238	g/10 min	0.16	0.1	0.04
MFR (190 °C, 21.6 kg)	ASTM D1238	g/10 min	-	10	6
Density	ASTM D1505	g/cm³	0.956	0.952	0.95
Melting Temperature	ASTM D3418	°C	135	130	134
Tensile Strength at Yield	ASTM D638	kg/cm²	260	280	300
Tensile Strength at Break	ASTM D638	kg/cm²	370	400	370
Elongation at Break	ASTM D638	%	950	900	850
Flexural Modulus	ASTM D790	kg/cm²	11,000	11,000	12,000
Notched Izod Impact Strength	ASTM D256	kg.cm/cm	27 (NB*)	42 (NB*)	72 (NB*)
Durometer Hardness	ASTM D2240	shore D	65	63	61
Vicat Softening Point	ASTM D1525	°C	125	126	125
ESCR; 25% Igepal, F ₅₀	ASTM D1693	Hours	> 500	> 1,000	> 1,000
End Product			Fender (wheel arch liner)	Automotive Bed Liner	
Product Highlight			<ul style="list-style-type: none">• Good processability and drawdown ability• High mechanical strength• Good stiffness• Good heat sealability	Outstanding mechanical strength, good weathering resistance and excellent product appearance	

Note : *C = Complete Break *P = Partial Break *NB = Non Break

InnoPlus: HDPE					
Properties	Test Method	Unit	Blow Molding		
			HD6600B	HD6200B	
MFR (190 °C, 2.16 kg)	ASTM D1238	g/10 min	0.4	0.45	
Density	ASTM D1505	g/cm³	0.957	0.962	
Melting Temperature	ASTM D3418	°C	135	135	
Tensile Strength at Yield	ASTM D638	kg/cm²	320	330	
Tensile Strength at Break	ASTM D638	kg/cm²	400	350	
Elongation at Break	ASTM D638	%	1,000	1,000	
Flexural Modulus	ASTM D790	kg/cm²	14,000	15,000	
Notched Izod Impact Strength	ASTM D256	kg.cm/cm	10 (P*)	12 (P*)	
Durometer Hardness	ASTM D2240	shore D	65	65	
Vicat Softening Point	ASTM D1525	°C	125	125	
ESCR; 25% Igepal, F ₅₀	ASTM D1693	Hours	400	60	
End Product			Reservoir Tank	Air Duct	
Product Highlight			High environmental stress cracking resistance (ESCR) High impact strength Wide variety blow molding applications of small to medium size container	High density polyethylene blow molding grade with optimum balance of processability, environmental stress cracking resistance (ESCR) and impact strength. They are used for wide variety blow molding applications of small to medium size container.	

Note : *C = Complete Break *P = Partial Break *NB = Non Break

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