



Low Density Polyethylene (LDPE)

Grade			Injection		Coating
			6630M	6810M	6520G
Properties	Unit	Method			
Melt Index MI _{2.16}	g/10min	ASTM D1238	25	50	8.0
Density	g/cm ³	ASTM D1505	0.918	0.915	0.916
Thermal properties					
Melting point	°C	DSC	106	104	105
Brittleness point	°C	ASTM D746	-60	-60	<-70
Softening point	°C	ASTM D1525	92	80	85
Mechanical properties					
Tensile strength at yield	Kg/cm ²	ASTM D638	120	90	90
Tensile strength at break	Kg/cm ²	ASTM D638	90	100	110
Elongation at break	%	ASTM D638	400	500	500
Flexural modulus	Kg/cm ²	ASTM D790	1800	1100	1100
Hardness	Shore D	ASTM D2240	50	45	52
Mechanical properties of film					
Tensile strength at yield	Kg/cm ²	ASTM D882B MD/TD			
Tensile strength at break	Kg/cm ²	ASTM D882B MD/TD			
Elongation at break	%	ASTM D882B MD/TD			
Secant modulus 1%	Kg/cm ²	ASTM D882B MD/TD			
Tear resistance (elmendorf)	N/mm	ASTM D1922 MD/TD			
Dart drop test	g	ASTM D1709			
Coefficient of friction(COF)		ASTM D1894			
Optical qualities					
Haze	%	ASTM D1003			
Gloss 45°	%	ASTM D2457			
Recommended film thickness	μ				
Additives					
Slip agent	Level				
Anti blocking agent	Level				
Characteristics			Excellent flowability High gloss Medium-rigidity	Excellent flowability High gloss Good flexibility	Excellent processability Good adhesion Small Neck-in
	Applications		Housewares High gloss toys Low thickness articles	Artificial flowers Low thickness articles powder coating	Coating on Aluminum · paper substrates Injection-articles Foam material
Notes	1. Injection temp.= 150-180°C 2. Coating temp.= 270-340°C				

Film						
6030F	6130F	6323F	6330F	6334F	6534F	6634F
0.27	0.8	2.5	2.1	2.1	5.0	8.0
0.922	0.924	0.918	0.924	0.924	0.924	0.924
113	113	107	113	113	112	112
<-70	<-70	<-70	<-70	<-70	<-70	<-70
96	98	95	96	96	92	92
95	120	100	100	100	110	110
190	170	150	150	150	140	120
700	700	600	600	600	600	500
1500	1800	1700	1800	1800	1800	1900
51	54	52	53	53	52	52
100/100	100/110	100/110	100/110	100/110	110/120	100/110
250/220	220/190	210/170	230/180	230/180	170/150	160/140
380/580	380/600	250/550	280/580	280/580	270/500	280/500
1700/1900	1900/2150	1900/2200	2000/2300	2000/2300	1900/2200	1800/2100
40/50	45/60	70/50	70/50	80/50	80/60	80/60
260	180	100	100	100	70	65
> 0.5	> 0.5	< 0.13	> 0.5	< 0.12	< 0.12	< 0.12
15	10	13	6.5	6.5	8	8
50	70	60	95	95	90	90
50-250	30-120	25-80	25-80	25-80	15-60	10-50
None	None	Medium	None	High	High	High
None	None	None	None	Medium	Medium	Medium
High-mechanical	Excellent-shrinkage Good optical medium-rigidity	Excellent-processability Flexibility	Excellent-processability Excellent-optical	Excellent-processability Excellent-optical	High optical Excellent draw-down	High-flowability Medium-rigidity
Heavy duty Agricultural shrink film	Shrink film Lamination-film Blow molding	General film X-linked Foam Zipper bag Blow molding	General transparent- film Lamination-film	General transparent- film Lamination-film	Thin transparent-film	Thin transparent-film Injection-articles
3. Film processing : screw=60mm φ · L/D=30 · BUR=2.5 · film thickness= 30 μ (MI>1.2) / 50 μ (MI<1.2) °						
4. Film processing temp.= 160 - 200°C · may need higher for low MI						
5. All LDPE products meet FDA 21-177-1520.						
6. Data shown are average values and should not be examined for specifications.						

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