



Low Density Polyethylene (LDPE)

-- Film Grade Data Sheets

Grade Name			Film						
			6030F	6130F	6323F	6330F	6334F	6534F	6634F
Properties	Unit	Method							
Melt Index $MI_{2.16}$	g/10min	ASTM D1238	0.27	0.8	2.5	2.1	2.1	5.0	8.0
Density	g/cm ³	ASTM D1505	0.922	0.924	0.918	0.924	0.924	0.924	0.924
Vinyl Acetate content	%								
Thermal properties									
Melting point	°C	DSC	113	113	107	113	113	112	112
Brittleness point	°C	ASTM D746	<-70	<-70	<-70	<-70	<-70	<-70	<-70
Softening point	°C	ASTM D1525	96	98	95	96	96	92	92
Mechanical properties									
Tensile strength at yield	Kg/cm ²	ASTM D638	95	120	100	100	100	110	110
Tensile strength at break	Kg/cm ²	ASTM D638	190	170	150	150	150	140	120
Elongation at break	%	ASTM D638	700	700	600	600	600	600	500
Flexural modulus	Kg/cm ²	ASTM D790	1500	1800	1700	1800	1800	1800	1900
Hardness	Shore D	ASTM D2240	51	54	52	53	53	52	52
ESCR	Hr	ASTM D1693							
Mechanical properties of film									
Tensile strength at yield	Kg/cm ²	ASTM D882B MD/TD	100/100	100/110	100/110	100/110	100/110	110/120	100/110
Tensile strength at break	Kg/cm ²	ASTM D882B MD/TD	250/220	220/190	210/170	230/180	230/180	170/150	160/140
Elongation at break	%	ASTM D882B MD/TD	380/580	380/600	250/550	280/580	280/580	270/500	280/500
Secant modulus 1%	Kg/cm ²	ASTM D882B MD/TD	1700/1900	1900/2150	1900/2200	2000/2300	2000/2300	1900/2200	1800/2100
Tear resistance (elmdorf)	N/mm	ASTM D1922 MD/TD	40/50	45/60	70/50	70/50	80/50	80/60	80/60
Dart drop test	g	ASTM D1709	260	180	100	100	100	70	65
Coefficient of friction(COF)		ASTM D1894	>0.5	>0.5	<0.13	>0.5	<0.12	<0.12	<0.12
Optical qualities									
Haze	%	ASTM D1003	15	10	13	6.5	6.5	8	8
Gloss 45°	%	ASTM D2457	50	70	60	95	95	90	90
Recommended film thickness	μ		50-250	30-120	25-80	25-80	25-80	15-60	10-50
Additives									
Slip agent	Level				Medium		High	High	High
Anti blocking agent	Level						Medium	Medium	Medium
Characteristics			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
Application			Heavy duty Agricultural shrink film	Shrink film Lamination- film Blow molding	General film X-linked Foam Zipper bag Blow	General transparent- film Lamination- film	General transparent- film Lamination- film	Thin, transparent- film	Thin transparent- film Injection- articles

PS : 1. film extrusion parameters : screw $\phi = 60\text{mm}$ 、L/D=30 、blow-up ratio(BUR)=2.5 、Temperature =160 - 200 °C.
thickness 30 μ (MI >1.2) / 50 μ (MI <1.2)

2. Data shown are average values and should not be examined for specifications.