



Linear Low Density Polyethylene (LLDPE) -- C4 Blown Film Grade Data Sheets

Grade			C4 Film								
			3210	3214	3410	3414	3220	3224	3224D	3310	3314
Properties	Unit	Method									
MI _{2.16}	g/10min	ASTM D1238	1.0	1.0	2.0			1.0			
Density	g/cm ³	ASTM D1505	0.920	0.926	0.920			0.9			
Thermal Properties											
Melting point	°C	DSC	122	124	122			122			
Brittleness point	°C	ASTM D746	<-70	<-70	<-70			<-70			
Softening point	°C	ASTM D1525	93	95	93			93			
Mechanical Properties											
Tensile strength at yield	Kg/cm ²	ASTM D882B MD/TD	100/110	120/130	100/110			100/110			
Tensile strength at break	Kg/cm ²	ASTM D882B MD/TD	410/320	440/340	360/280			350/280			
Elongation at break	%	ASTM D882B MD/TD	620/840	600/800	600/800			630/800			
Secant Modulus 1%	Kg/cm ²	ASTM D882B MD/TD	1450/1600	2300/3100	1500/2100			2000/2300			
Elmendorf Tear Resistance	g/25 μm	ASTM D1922 MD/TD	145/370	80/350	40/430			110/300			
Dart Drop Test	g	ASTM D1709	150	90	120			110			
Optical Properties											
Haze	%	ASTM D1003	13	15	15	17	22	24	29	10	12
Gloss _{45°}	%	ASTM D2457	43	47	44	47	43	47	50	55	55
Clarity	%		67	53	55	50	67	53	28	70	65
Additives											
Slip Agent			no	medium	no	medium	no	medium	medium	no	medium
Antiblocking Agent			no	medium	no	medium	no	medium	high	no	medium
Characteristics			Better sealing	Easier sealing	Better sealing			Better sealing			
			High puncture resistance	Greater drawdown	Greater drawdown			Better optical			
Applications			Greater drawdown	Better stiffness	Greater drawdown						
			High tensile strength	Better toughness	Good extrudability						
			Heavy duty sacks	Thin film	Light, Medium duty film			Lamination			
			Agricultural films	Wicketed bag	Stretchfilm			Food packaging			
			Liners	On-the-reel bag							
			Produce bags	Blending into shrink film improve burnthrough							
			Stretchfilm								

PS.: 1.Film Processing Conditions : Output=10kg/hr · BUR=2.0 · Thickness:Blown film=38 μm · Cast film 20 μm ·

2.The 4th character of Grade name represent the type of additive , 0:nomoral antioxidant · 4:high slipping and antiblocking agent · 5:ZnO Neutralizer · 6:Anti UV ·

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