



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
Gloss45 °	%	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 High puncture resistance Greater drawdown High tensile strength		Easier sealing Greater drawdown Better stiffness Better toughness		Better sealing Greater drawdown Good extrudability			Better sealing Better optical	
Applications			Heavy duty sacks Agricultural films Liners Produce bags Stretchfilm		Thin film Wicketed bag On-the-reel bag Blending into shrink film improve burnthrough		Light,Medium duty film Stretchfilm			Lamination Food packaging	

PS.: 1.Film Processing Conditions : Output=10kg/hr · BUR=2.0 · Thickness:Blown film=38 μm · Cast film20 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 ·