

线型低密度聚乙烯 Linear Low Density Polyethylene (LLDPE)

特性 PROPERTIES

特性 Properties	测试方法 Test Method (ASTM)	单位 Unit	等级 Grade												
			LL7410A ⁽¹⁾	LL7410D ⁽¹⁾	LL7410D1 ⁽¹⁾	LL7420A ⁽¹⁾	LL7420D ⁽¹⁾	LL7420D1 ⁽¹⁾	LL7610A ⁽¹⁾	LL7632A ⁽²⁾	LL7910A ⁽³⁾	LL7907A ⁽³⁾			
熔融指数 Melt Index	D1238	g/10 min	1	1	1	2	2	2	1	3.2	1	0.7			
密度 Density	D792	g/cm ³	0.918	0.918	0.918	0.918	0.918	0.918	0.918	0.918	0.918	0.927			
薄膜特性 Film Properties															
破断拉伸强度 (MD) Tensile Strength at break (MD)	D882	MPa	34	34	34	31	31	31	45	32	60	57			
破断拉伸强度 (TD) Tensile Strength at break (TD)	D882	MPa	26	26	26	23	23	23	34	29	53	45			
破断伸长率(MD) Elongation at break (MD)	D882	%	550	550	550	450	450	450	500	750	490	515			
破断伸长率(TD) Elongation at break (TD)	D882	%	700	700	700	600	600	600	700	830	675	696			
1%割线模数(MD) 1% Secant Modulus (MD)	D882	MPa	190	190	190	195	195	195	185	165	191	285			
1%割线模数(TD) 1% Secant Modulus (TD)	D882	MPa	220	220	220	220	220	220	205	170	224	326			
落镖冲击强度 Dart Impact Strength	D1709	g	100	100	100	85	85	85	200	120	206	120			
抗扯强度(MD) Tear Resistance (MD)	D1922	g	91	91	91	80	80	80	311	362	112	54			
抗扯强度(TD) Tear Resistance (TD)	D1922	g	350	350	350	318	318	318	803	492	574	737			
光泽度 (45°) Gloss (45°)	D2457		60	50	50	50	50	50	67	90	62	53			
雾度 Haze	D1003	%	10	17	13	13	20	15	10	2.5	8	10			
特点 Special Feature			高滑剂和开口剂 High Slip&Antiblock		低滑剂和开口剂 Low Slip&Antiblock		高滑剂和开口剂 High Slip&Antiblock		低滑剂和开口剂 Low Slip&Antiblock						
应用 Application			通用膜、衬垫、食品包装、重载及农用膜 General purpose films, liners, food packaging, heavy duty and agricultural films				拉伸包装薄膜、衬垫、工业袋、垃圾袋 Stretch wrap films, liners, industrial bags, refuse sacks and garbage bags			重包装袋及快速超薄应用 Heavy duty bags to high speed thin gauge applications		槽钵薄膜 拉伸及保鲜膜 Slot cast thin films, stretch and cling wrap films		重载膜、拉伸膜、收缩膜预涂膜、衬垫、食品包装多层包装膜及冷冻包装膜 Heavy duty films, stretch films, shrink films, lamination films, liners, food packaging, multilayer packaging films and freezer packaging films	

注：(1) 在吹胀比2及输出率14kg/hr下被吹制的25微米膜的膜特性。
(2) 在76mm冲模、0.76mm. 冲模间隙及输出率45kg/hr下被挤压出的25微米流延薄膜的膜特性。
(3) 在吹胀比2.5及输出率85kg/hr下被吹制的25微米膜的膜特性。

Notes: (1) film properties obtained from 25 microns film which was blown film extruded at blow up ratio 2 and 14 kg/hr output rate.
(2) film properties obtained from 25 microns film which was cast film extruded on 76 mm. die, 0.76 mm. die gap at 45kg/hr output rate.
(3) film properties obtained from 25 microns film which was blown film extruded at blow up ratio 2.5 and 85kg/hr output rate.

InnoPlus 牌线型低密度聚乙烯 (LLDPE) 由PTT Polyethylene Company Limited (PTTPE) 生产, PTTPE 为 PTT Chemical Public Company Limited (PTT Chemical) 的子公司。LLDPE的生产能力为40万吨/年。

InnoPlus LLDPE是在低压聚合下, 使用Univation科技许可的Unipol过程的气相而生产的。此技术能提供较大范围的LLDPE产品。可使用多种催化剂和共聚单体以生产具有不同应用范围的产品, 比如薄膜、注塑以及滚塑工艺。

Linear Low Density Polyethylene (LLDPE) under the brand of InnoPlus, produced by PTT Polyethylene Company Limited (PTTPE), a subsidiary of PTT Chemical Public Company Limited (PTT Chemical). The capacity for LLDPE production is at 400,000 MTA.

InnoPlus LLDPE is produced by low pressure polymerization, using Gas Phase of Unipol process under the license of Univation Technology. This technology can provide the wide range of LLDPE products. The variety of catalysts and comonomers could be used in order to producing products for the various applications, covering film, injection, and rotational molding.

特性 Properties	测试方法 Test Method (ASTM)	单位 Unit	等级 Grade			
			LL8420A	LL8435A	LL8450A	LL9650U
熔融指数 Melt Index	D1238	g/10 min	20	35	50	5
密度 Density	D792	g/cm ³	0.924	0.926	0.926	0.934
成型特性 Molded Plaque Properties						
屈服拉伸强度 Tensile Strength at yield	D638	MPa	12	13	13	14
破断拉伸强度 Tensile Strength at break	D638	MPa	8	8	9	16
破断伸长率 Elongation at break	D638	%	300	150	100	650
1%割线模数 1% Secant Modulus	D638	MPa	310	320	345	428
脆化温度 Brittleness Temperature	D746	°C	<-100	<-100	<-100	<-100
ESCR, F50	D1693	小时	150 ⁽¹⁾	40 ⁽¹⁾	4 ⁽¹⁾	>1000 ⁽²⁾
特点 Special Feature						紫外稳定剂 UV Stabilizer
应用 Application			通用喷射成型等级; 盖子、家用器皿、废物箱、母料载体 Injection Molding grade for general purpose applications; lids, housewares, trash bins, masterbatch carrier			室外储藏容器、化学品箱 Outdoor storage containers, chemical tanks

注：(1) F50, 弯条试验: 100% Igepal, 3.2mm. 样本, 无裂缝, 50°C
(2) F50, 弯条试验: 100% Igepal, 1.9mm. 样本, 有裂缝, 50°C

Notes: (1) F50, Bent strip test: 100% Igepal, 3.2 mm. specimen, no slit, 50°C
(2) F50, Bent strip test: 100% Igepal, 1.9 mm. specimen, slit, 50°C

