

SCG Plastics Product Reference Guide

Polyethylene

High Density Polyethylene

EL-Lene HDPE is High Density Polyethylene resin produced by bimodal process, a technology developed by Mitsui chemicals, Inc. of Japan

Film							
Product Name	MFR (g/10min)	Density (g/cm ³)	TS (kg/cm ²)	Tear Strength (g)	Dart Impact (g)	Recommended Applications	Key Characteristics
H5604F	0.04	0.956	MD: 620, TD: 310	MD: 3, TD: 80	139	General film	High tensile strength, good impact
F15	0.06	0.954	MD: 910, TD: 380	MD: 3, TD: 135	142	Film produced by high speed machine and wide lay flat film (>25")	High tensile strength, high productivity
H5615F	0.15	0.956	MD: 760, TD: 290	MD: 3, TD: 118	107	Ultra thin film (<10 micron)	High speed processing, high tensile strength

* tested by 12 micron film thickness

Extrusion Coating/Casting							
Product Name	MFR (g/10min)	Density (g/cm ³)	TS (kg/cm ²)	Tear Strength (g)	Dart Impact (g)	Recommended Applications	Key Characteristics
H377C	7.5	0.964	MD: 245, TD: 290	MD: 24, TD: 827	<60	Extrusion coating/lamination or casting for various packaging (for blending with LDPE/LLDPE)	Excellent film stiffness, moisture barrier and low surface friction

* tested by 30 micron film thickness

Injection							
Product Name	MFR (g/10min)	Density (g/cm ³)	ESCR, 25%Igepal (hr, F50)	FM (kg/cm ²)	Notch IZOD 23 °C (kg.cm/cm)	Recommended Applications	Key Characteristics
H6105JU	5.5	0.961	300	13000	3.5	General outdoor appliances	Weathering resistance, wide survice temperature range, good rigidity
H5814J	14.0	0.958	280	12500	3.0	General injection parts, bottle cap and closure, toy	Good processibility, good stiffness and impact strenght
H5818J	18.0	0.962	280	13000	2.5	General injection parts, bottle cap and closure, toy	Good processibility, good stiffness and impact strength
H6007JU	7.5	0.964	310	13500	3.5	Crate, Pallet, Industrial parts for outdoor uses	weathering resistance, high rigidity and impact strength

Blow Molding & Monofilament/Flat Yarn

H6670B	0.70	0.966	24	15000	15	Bottle for drinking water, fruit juice, soft drink and milk, etc.	Suitable for high speed machine, excellent processability and excellent stiffness.
H6430BM	0.40	0.966	24	15000	25		Good processability and excellent stiffness.
H6140B	0.30	0.962	100	13000	10	Bottle for milk, detergent, cosmetics, lube oil and chemical, etc.	Good processability, stiffness and ESCR.
H5840B	0.40	0.958	300	12000	10		Excellent ESCR and good processability.
H5480S	0.80	0.954	390	10000	17	Net, ropes and tarpaulin (Monofilament and flat yarn extrusion)	High tenacity, good product color, food contact applicable.

Cap and Closure

Product Name	MFR (g/10min)	Density (g/cm ³)	FM (kg/cm ²)	Notch IZOD 23 °C (kg.cm/cm)	ESCR, 10%Igepal (hr, F50)	Recommended Applications	Key Characteristics
H655JA	0.4	0.958	12000	10	400	Cap for carbonated soft drink	Excellent ESCR, specially designed to serve lightweight cap. Durable to high pressure and CO ₂ content.
H555J	1.8	0.956	11000	8	20	Cap for carbonated soft drink, juice, stiller water and mineral water	Durable to high pressure and CO ₂ content. With slip agent for good opening torque.
H555JA	1.8	0.956	11000	8	20		Durable to high pressure and CO ₂ content.
H455JA	4.5	0.961	12500	4	7	Cap for juice, stiller water and mineral water	Good processability and well balance mechanical strength.
H355JA	7.5	0.958	13500	3.5	6		High stiffness and good processability.
H255JA	11	0.958	11500	3	5		Excellent flowability and high energy saving for processing.

Linear Low Density Polyethylene

EL-Lene LLDPE is Linear Low Density Polyethylene resin produced by the gas phase process, a technology developed by BP Chemicals Co.,Ltd.,England

Film

Product Name	MFR	Density	TS	Tear Strength	Dart Impact	Recommended Applications	Key Characteristics
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	(g/10min)	(g/cm ³)	(kg/cm ²)	(g)	(g)		
L2009FA	1.0	0.919	MD: 380, TD: 350	MD: 145, TD: 370	130	General purpose bag	High productivity and can be blended with HDPE, LDPE to improve tear resistance and seal No slip/antiblock
L2009F	1.0	0.919	MD: 380, TD: 350	MD: 145, TD: 370	130	General purpose bag	High productivity and can be blended with HDPE, LDPE to improve tear resistance and seal Medium slip/ antiblock
L1810F	1.0	0.919	MD: 470, TD: 170	MD: 145, TD: 370	130	General purpose bag	High productivity and can be blended with HDPE, LDPE to improve tear resistance and seal strength High slip/ antiblock
L1810FI	1.0	0.919	MD: 470, TD: 170	MD: 145, TD: 370	130	Water-quenched blown film for vegetable or fruit packaging	High clarity and good openability Very high slip/antiblock
L2020F	2.0	0.920	MD: 220, TD: 130	MD: 125, TD: 330	90	Cast film for general purpose bag	High output and elongation Medium slip/antiblock

* tested by 38 micron film thickness

Low Density Polyethylene

EL-Lene LDPE is low density polyethylene resin produced by the autoclave process, a technology developed by ICI Co.,Ltd., England

Film							
Product Name	MFR (g/10min)	Density (g/cm ³)	TS (kg/cm ²)	Tear Strength (g)	Dart Impact (g)	Recommended Applications	Key Characteristics
LD1902FA	2.0	0.919	MD: 230, TD: 190	MD: 370, TD: 100	150	General purpose bag and medium weight shrink film	High strength and good optical properties, no slip/antiblock
LD1902F	2.0	0.919	MD: 230, TD: 190	MD: 370, TD: 100	150	General purpose bag (for blending with other PE)	High strength and good optical properties, medium slip/antiblock
LD2305F	3.5	0.923	MD: 240, TD: 190	MD: 400, TD: 275	78	Zip bags and general purpose film	Excellent clarity and gloss, medium slip/ antiblock
LD1905FA	5.0	0.919	MD: 200, TD: 150	MD: 370, TD: 210	130	Foam, bubble sheet, shoe sole, and general purpose bag (for blending with other PE)	High productivity and good optical properties, slip/ antiblock
LD1905F	5.0	0.919	MD: 200, TD: 150	MD: 370, TD: 210	130	General purpose bag (for blending with other PE)	High productivity and good optical properties, medium

* tested by 38 micron film thickness

Extrusion Coating

Product Name	MFR (g/10min)	Density (g/cm ³)	TS (kg/cm ²)	Tear Strength (g)	Dart Impact (g)	Recommended Applications	Key Characteristics
D477C	4.0	0.922	MD: 224, TD: 159	MD: 285, TD: 122	123	Coating/lamination on various substrates such as plastic film, aluminium foil, card board, woven sheet etc. for flexible packaging, release liners, woven sack, industrial wrapping, folding carton etc.	Excellent neck-in with high seal strength, film stiffness and low surface friction
D777C	7.0	0.918	MD: 190, TD: 140	MD: 280, TD: 120	76		Excellent neck-in, web stability and low set up time for low waste
D795C	9.0	0.918	MD: 160, TD: 150	MD: 280, TD: 120	72		High draw ability for thin film coating and high speed coating

* tested by 38 micron film thickness

Injection Molding

Product Name	MFR (g/10min)	Density (g/cm ³)	TS (kg/cm ²)	FM (kg/cm ²)	Notch IZOD 23 °C (kg.cm/cm)	Recommended Applications	Key Characteristics
LD1630J	30	0.916	90	1700	Non Break	Housewears, closure, toy parts, and masterbatch	Good flowability, good toughness and flexibility