

**Injection Molding**

Typical Properties		Melt Flow Rate (190°C/2.16kg)	Melt Flow Rate (190°C/2.16kg)	Density	Tensile Strength at Yield <sup>a</sup>	Tensile Strength at Break <sup>a</sup>	Flexural Modulus (1% secant) <sup>a</sup>	Shore D Hardness <sup>a</sup>	Notched Izod Impact Strength <sup>a</sup>	Environmental Stress Cracking Resistance (10% Igepal) <sup>ab</sup>	Environmental Stress Cracking Resistance (100% Igepal) <sup>ab</sup>	Vicat Softening Temperature <sup>a</sup>	Deflection Temperature Under Load (0.45MPa) <sup>a</sup>	Minimum biobased content	
ASTM Methods		D 1238	D 1238	D 1505/D 792	D 638	D 638	D 790	D 2240	D 256	D 1693	D 1693	D 1525	D 648	D 6866	
Unit		g/10min	g/10min	g/cm <sup>3</sup>	MPa	MPa	MPa	-	J/m	hF50	hF50	°C	°C	%	
HDPE	SHA7260	20	-	0.955	29	-	1350	64	25	-	<4	124	74	94	
	Pails & basins, Caps & Closures, Toys, Lids, Thin-walled parts and Housewares.														
	SHC7260	7.2	-	0.959	30	-	1350	64	35	-	<4	126	76	94	
	Industrial containers, Safety Helmets, Toilet seats, Housewares, Toys, Lids, Caps & Closures, Pallets and Boxes for beverages bottles.														
	SHD725LSL	4.5	-	0.954	27	-	1270	63	45	-	<5	127	74	94	
LDPE	Bins; Boxes for fish and groceries; Boxes for general purpose.														
	SGE7252	2.0	85.0	0.952	26	14	1200	55	50	40	-	125	72	96	
	Caps and closures for beverages.														
LDPE	SPB208	20	-	0.923	10	6	700	42	-	-	-	87	-	95	
	Masterbatches, Injection of large flat area parts.														
LDPE	SPB608	30	-	0.915	8	8	450	39	-	-	-	79	-	95	
	Masterbatches, Injection of large flat area parts.														

**Blow Molding and Tubing**

Typical Properties		Melt Flow Rate (190°C/2.16kg)	Melt Flow Rate (190°C/2.16kg)	Density	Tensile Strength at Yield <sup>a</sup>	Tensile Strength at Break <sup>a</sup>	Flexural Modulus (1% secant) <sup>a</sup>	Shore D Hardness <sup>a</sup>	Notched Izod Impact Strength <sup>a</sup>	Environmental Stress Cracking Resistance (10% Igepal) <sup>ab</sup>	Environmental Stress Cracking Resistance (100% Igepal) <sup>ab</sup>	Vicat Softening Temperature <sup>a</sup>	Deflection Temperature Under Load (0.45MPa) <sup>a</sup>	Minimum biobased content	
ASTM Methods		D 1238	D 1238	D 1505/D 792	D 638	D 638	D 790	D 2240	D 256	D 1693	D 1693	D 1525	D 648	D 6866	
Unit		g/10min	g/10min	g/cm <sup>3</sup>	MPa	MPa	MPa	-	J/m	hF50	hF50	°C	°C	%	
HDPE	SGF4950	0.34	28	0.956	30	30	1350	63	150	40	70	129	75	96	
	Bottles for household cleaning products and health and care products; Bottles for food products; Rigid containers for cosmetics and pharmaceutical applications (complies with USP 33).														
	SGF4950HS <sup>b</sup>	0.21	20	0.951	-	35	1100	-	175	150	1000	-	70	95	
	Carriers from 2 to 20L for chemical products; Flasks for concentrated detergent; Reservoir for wind shield wiper and air ducts.														
	SGF4960	0.34	28	0.961	30	35	1400	64	225	-	25	129	79	96	
LDPE	SGD4960	0.70	50	0.961	32	22	1600	64	89	19	24	128	79	96	
	Bottles for food applications such as dairy products and beverages; Containers for non-food applications such as alcohol, cosmetics and lubricant oils.														

a) Test specimens prepared from compression molded sheet, according to ASTM D 4703.  
 b) Compression molded 2mm notched-plaques, 50°C.  
<sup>b</sup> Developmental grade.

**Fiber extrusion**

Typical Properties		Melt Flow Rate (190°C/2.16kg)	Melt Flow Rate (190°C/2.16kg)	Density	Tensile Strength at Yield <sup>a</sup>	Tensile Strength at Break <sup>a</sup>	Flexural Modulus (1% secant) <sup>a</sup>	Shore D Hardness <sup>a</sup>	Notched Izod Impact Strength <sup>a</sup>	Environmental Stress Cracking Resistance (10% Igepal) <sup>ab</sup>	Environmental Stress Cracking Resistance (100% Igepal) <sup>ab</sup>	Vicat Softening Temperature <sup>a</sup>	Deflection Temperature Under Load (0.45MPa) <sup>a</sup>	Minimum biobased content
ASTM Methods		D 1238	D 1238	D 1505/D 792	D 638	D 638	D 790	D 2240	D 256	D 1693	D 1693	D 1525	D 648	D 6866
Unit		g/10min	g/10min	g/cm <sup>3</sup>	MPa	MPa	MPa	-	J/m	hF50	hF50	°C	°C	%
HDPE	SHA7260	20	-	0.955	29	-	1350	64	25	-	<4	124	74	94
	Bi-co nonwovens, fibers in general.													
LDPE	SHE150	1.0	-	0.948	28	40	1280	62	-	-	-	128	76	94
Raschel; Shading and protecting nets; Ropes.														

a) Test specimens prepared from compression molded sheet, according to ASTM D 4703.  
 b) Compression molded 2mm notched-plaques, 50°C.

**Blow and Cast Film Extrusion**

Typical Properties		Melt Flow Rate (190°C/2.16kg)	Melt Flow Rate (190°C/2.16kg)	Melt Flow Rate (190°C/2.16kg)	Density	Film Thickness	Tensile Strength at Break (MD/TD)	Elongation at break (MD/TD)	Tensile Modulus (MD/TD)	Dart Drop Impact <sup>a</sup>	Elmendorf Tear Strength (MD/TD)	Haze	Gloss 60°	Minimum biobased content	
ASTM Methods		D 1238	D 1238	D 1238	D 1505/D 792	-	D 882	D 882	D 882	D 1709	D 1922	D 1003	D 2457	D 6866	
Unit		g/10min	g/10min	g/10min	g/cm <sup>3</sup>	µm	MPa	%	MPa	g/F50	gF	%	-	%	
HDPE	SGM9450F	-	0.33	9.3	0.952	12.5	85/45	590/740	750/870	245	58.51	-	-	96	
	Bags in general (like T-shirt bags, Handle Bags, Star Bags, others); Geomembrane.														
LDPE	SHE150	1.0	-	-	0.948	-	-	-	-	-	-	-	-	94	
Blend with LLDPE to improve blown film stiffness. Film for cereal liners.															
LLDPE	SLL118	1.0	-	-	0.916	38	50/40	1130/1430	180/200	120	-370	-	-	87	
	Stretch films; liners; LDPE and HDPE blends and packages for general use. Others applications: blends for irrigation pipes.														
	SLL118/21	1.0	-	-	0.919	38	40/30	1070/1340	210/230	130	180/400	-	-	87	
	Automatic Packaging (FFS); liners; general purpose; HDPE and LDPE blends.														
	SLL5405S	1.0	-	-	0.919	38	40/30	1070/1340	210/230	130	180/400	-	-	87	
	LLDPE and HDPE blends, films with low thickness for general use, bags for waste, special bags for water and protection of clothes.														
	SLL218	2.3	-	-	0.918	38	40/30	1310/1560	200/230	100	150/190	-	-	87	
	Stretch films; liners; LDPE and HDPE blends and packages for general use.														
	SLL218/21	2.0	-	-	0.917	38	30/30	1140/1440	200/220	100	140/340	-	-	87	
	Liners; LDPE and HDPE blends; general use packages; technical films for automatic packaging.														
SLL318	2.7	-	-	0.918	38	30/30	1220/1440	180/200	90	120/340	-	-	87		
Stretch films; liners; LDPE and HDPE blends and packages for general use. Others applications: blends for irrigation pipes; insulation for low and medium tension XLPE wire and cable.															
SLH118	1.0	-	-	0.916	38	40/40	1080/1360	200/210	150	300/510	-	-	84		
Stretch films; liners; LDPE and HDPE blends and packages for general use. Others applications: blends for irrigation pipes.															
SLH218	2.3	-	-	0.916	38	40/40	1170/1500	210/240	110	240/520	-	-	84		
Stretch films; Liners; LDPE and HDPE blends; packages for general use; Others applications: insulation for low and medium tension XLPE wire and cable; blends for irrigation pipes.															
SLH0820/30AF	0.8	-	-	0.92	25	50/40	950/1180	170/180	170	270/500	-	-	84		
Lamination; Heavy duty bags; Blends with LDPE and HDPE.															
LDPE	SBF0323HC	0.32	-	-	0.923	38	40/30	390/1040	-	100	-90	10	72	95	
	Heavy duty bags; Agriculture, co-extruded and shrink films.														
	SBF0323/12H	0.32	-	-	0.923	38	40/30	390/1040	-	100	-90	10	72	95	
	Automatic packaging of solid and liquid products; shrink films for pallets.														
	STN7006	0.6	-	-	0.924	50	25/20	350/700	140/170*	170	310/250	9	86	95	
	High clarity films for coextruded food packaging, such as: cheese, meat, sausages, sliced ham, etc. Cast films for table cloth, curtains and laminated tissues. Flexible bottles for solids, liquids or pasties products for hygiene and cleanliness.														
	STS7006	0.6	-	-	0.924	50	25/20	350/700	140/170*	170	310/250	9	86	95	
	High clarity films for coextruded food packaging, such as: cheese, meat, sausages, sliced ham, etc.														
	SEB853	2.7	-	-	0.923	38	30/20	270/1040	-	70	-100	5	113	95	
	Typical blown film applications include films for diapers and other general purposes as well as LLDPE and HDPE blends.														
SEB853/72	2.7	-	-	0.923	38	30/20	270/1040	-	70	-100	5	112	95		
Lamination film; general purpose; automatic packaging of solids products (FFS).															
SBC818	8.1	-	-	0.918	25	25/20	380/870	-	64	-	8	76	95		
Extrusion coating. Injection of general parts and carrier for masterbatches.															
SBC818/50	8.1	-	-	0.918	25	25/20	380/870	-	64	-	8	76	45		
Extrusion coating. Injection of general parts and carrier for masterbatches.															
SPB681	3.8	-	-	0.922	38	30/20	370/1070	-	60	-100	4	120	95		
Blown and Cast Film Extrusion. Injection molding.															
SPB681/59	3.8	-	-	0.922	38	30/20	340/1050	-	60	-100	5	112	95		
Films for lamination and general purpose.															

MD = Machine Direction; TD = Transversal Direction  
 Additives: AB = antiblocking agent, S = slip agent, PPA = polymer processing agent.  
 \*Tensile Modulus - 2% secant (MD/TD)  
 For more details, please see product data sheet.