Flexural Modulus, MPa (psi) 23°C (73°F)	D-790	83 (12,000)
IMPACT	ASTM Test Method	Property Value
Notched Izod Impact, J/m (ft-lbs/in) 23°C (73°F)	D-256	NB
THERMAL	ASTM Test Method	Property Value
Vicat, B/1 (120 deg. C/h, 10N), °C(°F)	D-1525	48 (118)
ELECTRICAL	ASTM Test Method	Property Value
Volume Resistivity	D-257	>1E13
Surface Resistivity	D-257	>1E13
Dielectric Constant (1000000 Hz, 0,0394 in)	D-150	2.5
OPTICAL	ASTM Test Method	Property Value
Light Transmission, %	D-1003	93
Refractive Index		1.56
BLOWN FILM PROPERTIES	ASTM Test Method	Property Value
Elongation at Break (MD), %	D-882	550
Elongation at Break (TD), %	D-882	540
Tensile Modulus (MD), MPa	D-882	170 (24,600)
Tensile Modulus (TD), MPa	D-882	128 (18,600)
Elmondorf Tear (MD), g (lbs.)	D-1922	530 (1.17)
Elmondorf Tear (TD), g (lbs.)	D-1922	541 (1.19)
Haze, %	D-1003	1
Oxygen Transmission Rate (23°C/0% RH), cc/m²/day (cc/100in²/day)	D-3985	5580.0 (360)
Water Vapor Transmission Rate (23°C/100% RH), g/m²/day (g/100in²/day)	F-1249	9.8 (0.63)
Puncture, Energy at Peak Force, J(in-lb)	D-3763	2.4 (21.3)
Puncture, Total Energy, J(in-lb)	D-3763	3.4 (30.2)
Water Shrinkage (100°C for 30 sec.), %		0.63

[0035] Non-limiting examples of other suitable block copolymers include: KRATON™ D SBS series, such as D 1101, 1102, 1153, 1155, etc.; KRATON™ D styrene-isoprene-styrene (SIS) series, such as D 1111, 1113, 1117, 1119, etc.; KRATON™ G series, such as styrene-ethylene-butylene-styrene (SEBS): G 1633, 1650, 1651 etc. and styrene-ethylene-propylene-styrene (SEPS): G 1730,

[0045] In certain embodiments, gamma radiation is used to graft a grafting agent to at least one of inner layer 12 and outer layer 20, such that the modified layer(s) adhere(s) directly to barrier layer 16. Suitable grafting agents include but are not limited to acrylic acids, such as ethylene acrylic acid, and the like. Preferably ethylene acrylic acid is radiation grafted to polyethylene layers to render the layers adherent to aluminum. Examples of grafting techniques suitable for use in the present invention are disclosed in, e.g., U.S. Patent Nos. 3,115,418 and 3,270,090 and Guimon, "Radiation grafting of high density polyethylene and polypropylene." Radiat. Phys. Chem. 14, pp. 841–846 (1979).

[0046] In certain embodiments, plasma modification is used to make at least one of inner layer 12 and outer layer 20 adhere directly to barrier layer 16. Examples of plasma modification techniques suitable for use in the present invention are disclosed in, e.g., Statutory Invention Reg. No. H1164, which discloses a method of treating the surface of polymer films, such as PE films, with a low temperature gas plasma so as to improve the subsequent bonding of aluminum to the polymer surface without the need for adhesives; Hall et al., "Activated gas plasma surface treatment of polymers for adhesive bonding" Journal of Applied Polymer Science, Volume 13 Issue 10, Pages 2085 – 2096 (2003); and Minford, "Handbook of aluminum bonding technology and data" (CRC Press, 1993) at e.g., p.13.

[0047] In preferred embodiments of the invention comprising the use of plasma treated layers, the plasma is atmospheric plasma, such as that produced by an atmospheric plasma system available from Enercon Industries Corp. (Menomonee Falls, WI). Preferred parameters for this treatment step are as follows:

Parameter	Preferred	More Preferred
Power Supply Frequency	50-300K	About 150K
Speed (m/s)	0.0508 – 1 (10-200 ft./min.)	0.5 (100 ft./min.)
Gap (mm)	0.025 – 0.25 (0.01-0.1 inch)	0.114 (0.045 inch)
Power (kW)	2-20	About 6
Watt Density W/m^2	21.7 – 217 (2-20 W/ft^2)	About 130 (12 W/ft^2)

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Water Vapor Transmission Rate (23°C/100% RH), g/100in²/day (g/m²/day)	F-1249	0.63 (9.8)
Puncture, Energy at Peak Force, J(in-lb)	D-3763	2.4 (21.3)
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