

## VINPOL™ LH00938

### Linear Low Density Polyethylene

Melt Index: 0.90

Density: 0.938

**VINPOL LH00938** is a medium density ethylene 1-hexene copolymer offering excellent extrusion processing and tensile, modulus impact and puncture film properties. This product can also be employed in medium and high density Wire and Cable (W&C) jacketing. It has a good combination of processability with mechanical strength, abrasion and ESCR performance. Sufficient carbon black or UV stabilizer should be added to meet cable jacketing applications. Applications include bread bags, hygiene film, lamination film, compression packaging Lami-tubes and monofilament. W&C applications include communications cable, high, medium and low voltage jacketing.

Resin Property	Typical Value	Units	Test Method
Melt Index, 2.16 Kg at 190 ° C	0.9	g/10 min	ASTM D-1238
Density	0.938	g/cc	ASTM D-792
Peak Melting Point	257 (125)	°F (°C)	Supplier Method
Vicat Softening Point	248 (120)	°F (°C)	Supplier Method
*Tensile Strength at Yield, MD/TD	2,600 (18)/3,000 (21)	psi (MPa)	ASTM D-882
*Tensile Strength at Break, MD/TD	8,100 (60)/6,300 (43)	psi (MPa)	ASTM D-882
*Elongation at Break, MD/TD	600/830	%	ASTM D-882
*1% Secant Modulus, MD/TD	74,000 (510)/86,000 (590)	psi (MPa)	ASTM D-882
*Dart Drop Impact	<60	g	ASTM D-1709A
*Elmendorf Tear Strength, MD/TD	20/550	g	ASTM D-1922
*Puncture Force	8 (35)	lbf (N)	Supplier Method
*Puncture Energy	8.7 (0.98)	In-lb (J)	Supplier Method
*Gloss (45°)	35		ASTM D-2457
*Haze	19	%	ASTM D-1003
**Tensile Strength at Yield, 2 in/min (50 mm/min)	3,000 (21)	psi (MPa)	Supplier Method
**Tensile Strength at Break, 2 in/min (50 mm/min)	5,500 (38)	psi (MPa)	Supplier Method
**Elongation at Yield, 2 in/min (50 mm/min)	10	%	Supplier Method
**Elongation at Break, 2 in/min (50 mm/min)	840	%	Supplier Method
**1% Secant Modulus, Procedure A, 0.051 in/min (1.3 mm/min)	93,000 (640)	psi (MPa)	Supplier Method
**Environmental Stress Crack Resistance, Cond. B, 10% Igepal, F50	>1000	Hrs	Supplier Method
**Durometer Hardness	56	Shore D	Supplier Method
**Volume Resistivity (500 V)	7.0E+14	Ohms*m	IEC 62631-3-1
**Relative Permittivity (1 MHz)	2.31	-	IEC 62631-3-1
**Dissipation Factor (1 MHz)	1.3E-4	-	IEC 62631-3-1

\*Film (1 mil/25.4 micron) made on a 2.5 inch (63.5mm) blown film line with a 2.5:1 BUR, a melt temperature of 380-400°F (193-204°C), a 30 mil (0.76mm) die gap at a rate of 10 lbs/hr/in die circumference (1.79 kg/hr/cm).

\*\*Properties measured on Compression Molded specimens

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