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## Polyolefin Compounds for Wire and Cable

Key Properties and Applications

# Polyolefin Compounds for Wire and Cable

Product	Typical Customer Application	Melt Flow (g/10 min.)	Density (g/cm <sup>3</sup> )
<b>Low Density Polyethylene</b>			
<i>Petrothene</i> NA940000	Natural insulation and jacket base resin	0.25	0.918
<i>Lupolen</i> 1840D*	Natural insulation or jacket base resin	0.25	0.919
<i>Lupolen</i> GX 4087*	Solid and foamed insulation; base resin in direct peroxide injection applications	1.5	0.919
<i>Petrothene</i> NA951080	Solid and foamed insulation; base resin in direct peroxide injection applications	2.2	0.920
<i>Petrothene</i> NA217080	Gas injection blending component used in RF coax insulation	5.6	0.923
<i>Petrothene</i> NA204090	Cable components and accessories	7	0.918
<i>Petrothene</i> NA202000	Cable components and accessories	22	0.915
<i>Petrothene</i> NA270001	Cable components and accessories; skin coat for skin-foam-skin insulation	70	0.915
<b>Ethylene Vinyl Acetate (EVA)</b>			
<i>Ultrathene</i> UE672006	Natural insulation and jacket base resin	0.45	13.5% VA
<i>Petrothene</i> NA362005	Natural insulation and jacket base resin	0.5	6.6% VA
<i>Ultrathene</i> UE624000	Natural insulation and jacket base resin	2.1 (EMI)	18% VA
<b>Ethylene Butyl Acrylate (EBA)</b>			
<i>Lucalen</i> A2700H*	Natural insulation or flexible jacket base resin	1.4	15% nBA
<i>Lucalen</i> A2700M*	Natural base resin for semiconductive shields and HFFR insulations	7.2	17% nBA
<i>Lucalen</i> A2700P*	Natural base resin for semiconductive shields and HFFR insulations	15	17% nBA
<b>Ethylene t-Butyl Acrylate Acrylic Acid (E/tBA/AA)</b>			
<i>Lucalen</i> A2920M*	Adhesive resin for the bonding of aluminium/copper and polyethylene	7	7% tBA + 4% AA
<b>Linear Low Density and Medium Density Polyethylene</b>			
<i>Petrothene</i> GA808091	LLDPE natural insulation and jacket base resin	0.75	0.920
<i>Petrothene</i> PR92735	LLDPE black jacket	0.72	0.930
<i>Petrothene</i> GA808093	LLDPE natural insulation and jacket base resin with metal deactivator	0.75	0.920
<i>Petrothene</i> GA837091	MDPE natural insulation and jacket base resin	0.75	0.935
<i>Petrothene</i> HR92953	MDPE black jacket	0.75	0.945
<i>Petrothene</i> GA616050	LLDPE natural base resin	7	0.918
<i>Petrothene</i> GA564189	LLDPE natural base resin	21	0.924
<b>Black Masterbatch</b>			
<i>Petrothene</i> PM92973	LLDPE black masterbatch (40%) with good thermal stability	6.8 (HLMl)	1.140

Note: Products listed represent only a portion of the products selected for wire and cable. Products with an \* are produced in Europe and those with \*\* are produced in both Europe and the U.S. All other products are produced in the U.S.

For a complete listing, visit our website at [www.lyb.com/wireandcable](http://www.lyb.com/wireandcable)

Product	Typical Customer Application	Melt Flow (g/10 min.)	Density (g/cm <sup>3</sup> )
<b>High Density Polyethylene</b>			
Numerous broad and bi-modal HDPE natural and black compounds	Conduit	0.06 to 0.4	0.94 to 0.95
<i>Petrothene</i> KR92828	Black jacket and insulation	0.17	0.955
<i>Petrothene</i> KR52828E*	Black jacket and insulation	0.3	0.956
<i>Petrothene</i> LR52800E*	Natural insulation or jacket base resin; microduct for fiber optic cable	0.3	0.950
<i>Petrothene</i> KR92717	Black jacket and insulation	0.7	0.948
<i>Petrothene</i> LR590005	Natural insulation and jacket base resin with metal deactivator	0.8	0.948
<i>Petrothene</i> LR590001	Natural insulation and buffer tube base resin; used in communication cables where pedestal test is required	0.8	0.948
<i>Petrothene</i> LR686001	Chemical foamed insulation; used in communication cables where pedestal test is required	0.8	0.948
<i>Alathon</i> M5370RF	Gas injection blending component used in RF coax insulation	7.3	0.953
<b>Polypropylene</b>			
<i>Catalloy</i> **	Broad range of <i>Adflex</i> , <i>Hifax</i> and <i>Softell</i> Thermoplastic Polyolefins for various power and communication cables	0.6 to 30	0.880 to 0.900
<i>Petrothene</i> PP1510PC	Natural insulation and jacket base resin	1.3	0.902
<i>Moplen</i> RP210G*	Random copolymer used as natural insulation	1.8	0.900
<i>Pro-Fax</i> EP315J	Natural insulation and jacket base resin with metal deactivator	2.6	0.902
<b>125°C Flame Retardant</b>			
<i>Petrothene</i> XL07420B	Thin-wall automotive crosslinkable via continuous vulcanization (C.V.)	N/A	1.400
<i>Petrothene</i> XL07425	Automotive and appliance wire insulation, C.V. crosslinkable	N/A	1.400
<i>Petrothene</i> YR19600B	Thin-wall automotive crosslinkable via radiation e-beam	N/A	1.400
<b>Moisture Cure</b>			
<i>Aquathene</i> moisture crosslinkable systems offer:			
– Building, industrial, submersible pump, airport lighting, ruggedized and photovoltaic cable applications			
– UL Listings include SIS, RHW-2, XHHW-2, VW-1, FT4, cable tray use, USE-2.			
– CSA certifications include R90, RWU90, -40°C, FT1, FT2			
– Track resistance (ICEA T-27-581)			
<i>Aquathene</i> AQ120000	EVS copolymer natural base resin		
<i>Aquathene</i> FR409800	RoHS-compliant, colorable FR masterbatch; XHHW-2	0.7	1.470
<i>Aquathene</i> FR439800	RoHS-compliant, colorable FR-catalyst masterbatch; XHHW-2	0.7	1.470
<i>Aquathene</i> FR420000	RoHS-compliant, colorable FR-catalyst masterbatch; XHHW-2, VW-1, FT-4 and sunlight-resistant	2.80	2.040
<i>Aquathene</i> CM04483	Fast acting catalyst masterbatch	13.0	0.936
<i>Aquathene</i> PM92949C	Black masterbatch (40%)	NA	1.140
<i>Aquathene</i> CM04482	Standard Catalyst Masterbatch	7	0.926
Broad range of PE resins	Abuse resistance and Monosil crosslinking	0.35 to 8.2	0.92 to 0.965

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