



### **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/cm³)
Low Density Polyethylene			
Petrothene NA940000	Natural insulation and jacket base resin	0.25	0.918
Lupolen 1840D*	Natural insulation or jacket base resin	0.25	0.919
Lupolen GX 4087*	Solid and foamed insulation; base resin in direct peroxide injection applications	1.9	0.924
Petrothene NA951080	Solid and foamed insulation; base resin in direct peroxide injection applications	2.2	0.920
Petrothene NA217080	Gas injection blending component used in RF coax insulation	5.6	0.923
Petrothene NA204090	Cable components and accessories	7	0.918
Petrothene NA202000	Cable components and accessories	22	0.915
Petrothene NA270001	Cable components and accessories	70	0.915
Ethylene Vinyl Acetate (EVA)			
Ultrathene UE672006	Natural insulation and jacket base resin	0.45	13.5% VA
Petrothene NA362005	Natural insulation and jacket base resin	0.5	6.6% VA
Ultrathene UE624000	Natural insulation and jacket base resin	2.1 (EMI)	18% VA
Petrothene YR92126	Black thermoplastic semiconductive shield and jacket compound	7.7	1.130
Ethylene Butyl Acrylate (EBA	)		
Lucalen A2700H*	Natural insulation or jacket base resin	1.4	15% nBA
Lucalen A2700M*	Natural base resin for semiconductive shields and HFFR insulations	7.2	17% nBA
Lucalen A2700P*	Natural base resin for semiconductive shields and HFFR insulations	15	17% nBA
Ethylene t-Butyl Acrylate Ac	ylic Acid (E/tBA/AA)		
Lucalen A2920M*	Adhesive resin for the bonding of aluminium/copper and polyethylene	7	7% tBA + 4% AA
Linear Low Density and Med	ium Density Polyethylene		
Petrothene GA808091	LLDPE natural insulation and jacket base resin	0.75	0.920
Petrothene PR92735	LLDPE black jacket	0.72	0.930
Petrothene GA808093	LLDPE natural insulation and jacket base resin with metal deactivator	0.75	0.920
Petrothene GA837091	MDPE natural insulation and jacket base resin	0.75	0.935
Petrothene HR92953	MDPE black jacket	0.75	0.945
Petrothene GA616050	LLDPE natural base resin	7	0.918
Petrothene GA564189	LLDPE natural base resin	21	0.924
Black Masterbatch			
Petrothene PM92973	LLDPE black masterbatch (40%)	6.8 (HLMI)	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

Product	Typical Customer Application	Melt Flow (g/10 min.)	Density (g/cm³)
High Density Polyethylene			
Numerous broad and bi-modal HDPE natural and black compounds	Conduit	0.06 to 0.4	0.94 to 0.95
Petrothene KR92828	Black jacket and insulation	0.17	0.955
Petrothene KR52828E*	Black jacket and insulation	0.3	0.956
Petrothene LR52800E*	Natural insulation or jacket base resin	0.3	0.950
Petrothene KR92717	Black jacket and insulation	0.7	0.948
Petrothene LR590005	Natural insulation and jacket base resin with metal deactivator	0.8	0.948
Petrothene LR590001	Natural insulation and buffer tube base resin; used in communication cables where pedestal test is required	0.8	0.948
Petrothene LR686001	Chemical foamed insulation; used in communication cables where pedestal test is required	0.8	0.948
Alathon M5370RF	Gas injection blending component used in RF coax insulation	7.3	0.953
Polypropylene			
Catalloy**	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
Petrothene PP1510PC	Natural insulation and jacket base resin	1.3	0.902
Moplen RP210G*	Random copolymer used as natural insulation in power cables	1.8	0.900
Moplen HP501H*	Polypropylene homopolymer used as natural insulation in communication cables	2.1	0.900
Pro-Fax EP315J	Natural insulation and jacket base resin with metal deactivator	2.6	0.902
125°C Flame Retardant			
Petrothene XL07420B	Thin-wall automotive crosslinkable via continuous vulcanization (C.V.)	N/A	1.400
Petrothene XL07425	Automotive and appliance wire insulation, C.V. crosslinkable	N/A	1.400
Petrothene YR19600B	Thin-wall automotive crosslinkable via radiation e-beam	N/A	1.400
Moisture Cure			

### Aquathene 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)

Aquathene FR409800	RoHS-compliant, colorable FR masterbatch; XHHW-2	0.7	1.470
Aquathene FR439800	RoHS-compliant, colorable FR-catalyst masterbatch; XHHW-2	0.7	1.470
Aquathene AQ120000	EVS copolymer natural base resin	1.5	0.923
Aquathene FR420000	RoHS-compliant, colorable FR-catalyst masterbatch; XHHW-2, VW-1, FT-4 and sunlight-resistant	2.80	2.040
Aquathene CM04483	Catalyst masterbatch	13.0	0.936
Aquathene PM92949C	Black masterbatch (40%)	NA	1.140
Broad range of PE resins	Abuse resistance and Monosil crosslinking	0.35 to 8.2	0.92 to 0.965

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