

Mobility and transportation

Polyethylene - Blow molding

Grades are listed in order of resin type, then increasing melt index

Trade name	Grade name	Resin type	Melt index (2.16 kg, 190°C) (g/10min)	Density (g/cc)	Typical customer application
Petrothene	LP500200	HDPE	0.20	0.946	High ESCR
Petrothene	LB500302	HDPE	0.30	0.949	ESCR
Petrothene	LB560402	HDPE	0.35	0.952	HIC
Lupolen	4261 AG	HDPE	6.0 (HLM)	0.945	Automotive Plastic Fuel Tank
Petrothene	NA980000	LDPE	0.25	0.920	High melt strength blow mold tubing
Petrothene	NA963083	LDPE	0.70	0.919	General purpose, high impact applications
Petrothene	NA960000	LDPE	1.0	0.920	General purpose

Polyethylene - Film

Grades are listed in order of increasing melt index

Trade name	Grade name	Resin type	Melt index (2.16 kg, 190°C) (g/10min)	Base resin density (g/cc)	Antiblock (ppm)	Typical customer application
Petrothene	NA980000	LDPE	0.25	0.920	-	Heavy Duty Packaging / Shrink
Petrothene	NA983085	LDPE	0.25	0.920	4000	Heavy Duty Packaging / Shrink
Petrothene	NA963083	LDPE	0.7	0.919	4000	Liners
Lupolen	2221F	LDPE	0.8	0.922	-	Clarity
Petrothene	NA305212	LDPE	0.8	0.922	2000	Clarity Shrink
Petrothene	NA271009	LDPE	1.2	0.930	-	Film overwrap applications

Polyethylene - Film EVA

Trade name	Grade name	Resin type	Status	Melt index (2.16 kg, 190°C) (g/10min)	Base Resin Density (g/cc)	% VA	Typical customer application
Petrothene	NA362005	EVA	C:A	0.5	0.926	6.6	Heavy Duty Packaging, Ice Bags, EVA

Polyethylene - Injection molding

Trade name	Grade name	Resin type	Melt index (2.16 kg, 190°C) (g/10min)	Base resin density (g/cc)	Typical customer application
Alathon	M5370	HDPE	6.9	0.953	Pails/Gen. Purpose

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Polyethylene - Sheet and profile extrusion

Trade name	Grade name	Resin type	Status	Melt index (2.16 kg, 190°C) (g/10min)	Base resin density (g/cc)	Typical customer application
<i>Petrothene</i>	LB560402	HDPE	C:A	0.35	0.952	Sheet/EXT

Wire and cable

Within each section, grades are listed in order of grade name

Trade name	Grade name	EMI (g/10min) ASTM D1238	Product Density (g/cc)	Typical Customer Application
Ethylene Vinyl Acetate				
<i>Ultrathene</i>	UE624080	2.1	18% VA	Natural insulation and jacket base resin
125°C Flame Retardant				
<i>Petrothene</i>	T3XL7420	2.1	1.4	Nonhalogenated insulation used in thin-wall automotive; C.V. crosslinkable
<i>Petrothene</i>	XL07420B	2.1	1.4	Nonhalogenated insulation used in thin-wall automotive; C.V. crosslinkable
<i>Petrothene</i>	XL07425	2.1	1.4	Nonhalogenated insulation used in automotive and appliance; crosslinkable via continuous vulcanization (C.V.)
<i>Petrothene</i>	XLD7425	2.1	1.4	Nonhalogenated insulation used in automotive; C.V. crosslinkable
<i>Petrothene</i>	YR19513	2.1	1.4	Nonhalogenated striping compound; no cure
<i>Petrothene</i>	YR19548	2.1	1.4	Nonhalogenated insulation used in automotive; e-beam crosslinkable

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Mobility and transportation

Polypropylene

Within each section, grades are listed in order of increasing melt flow rate (MFR)

Trade name	Grade name	Melt Flow Rate (g/10min) ASTM D1238	Tensile Strength (psi) ASTM D638	Flexural Modulus (psi) (1% Secant) ASTM D790	Notched Izod Impact (73°F) (ft-lbs/in) ASTM D256	HDT (°F) (66 psi) ASTM D648	UL Listed	Additives	Typical Customer Application	Key properties
Homopolymers										
<i>Adstif</i>	HA802H	2.3	5400	275000	1.0	219	No		Compounding, BOPP, Thermoforming, Sheet, Plastic Lumber	HCPP high stiffness
<i>Pro-fax</i>	PH350	3.5	4800	200000	1.0	190	No		Color concentrates, polymer modifier, wood composites	Lightly stabilized flake, compounding, improved mixing and dispersion with pigments and additives
<i>Pro-fax</i>	6523	4.0	4800	200000	1.0	190	Yes	LTHA	Automotive, Sheet, Thermoforming	Enhanced heat stability
<i>Pro-fax</i>	6301	12	4900	210000	0.6	200	No		Color concentrates, polymer modifier, wood composites	Lightly stabilized flake, compounding, improved mixing and dispersion with pigments and additives
<i>Pro-fax</i>	6323	12	4900	210000	0.6	200	Yes	LTHA	Automotive	Enhanced heat stability
<i>Adstif</i>	HA801U	65	6100	290000	0.3	270	No	N	Rigid packaging, color concentrates	High MFR, HCPP high stiffness
<i>Metocene</i>	MF650W	500	4800	230000	n.a.	213	No		Melt blown fiber applications, compounding	Ultra-high MFR flake, improved mixing and dispersion with pigments and additives
<i>Metocene</i>	MF650X	1200	3300	245000	n.a.	248	No		Melt blown fiber applications, compounding	Ultra-high MFR flake, improved mixing and dispersion with pigments and additives
<i>Metocene</i>	MF650Y	1800	2800	245000	n.a.	252	No		Melt blown fiber applications, compounding	Ultra-high MFR flake, improved mixing and dispersion with pigments and additives
Impact Copolymers										
<i>Pro-fax</i>	7823	0.45	4100	180000	N.B.	185	Yes	LTHA	Automotive	High impact, enhanced heat stability
<i>Pro-fax</i>	SV258	1.2	4100	180000	3.9	180	Yes		Corrugated board, profiles, thermoforming	High Impact
<i>Pro-fax</i>	7624	1.4	4100	175000	2.7	180	Yes	LTHA	Tubing	Good Dimensional Stability; Good Heat Aging Resistance; Low Temperature Impact Resistance
<i>Pro-fax</i>	SV152	1.4	3500	165000	N.B.	195	No	N, LTHA	Automotive	Very high impact
<i>Pro-fax</i>	8623	1.5	3400	150000	N.B.	170	Yes	LTHA	Automotive, Sheet, Extrusion	Very high impact, enhanced heat stability
<i>Pro-fax</i>	7523	4.0	4100	180000	1.6	180	Yes	LTHA	Automotive	Medium impact, enhanced heat stability
<i>Pro-fax</i>	8523	4.0	3100	140000	N.B.	165	Yes	LTHA	Automotive	Very high impact, enhanced heat stability
<i>Pro-fax</i>	SB786	8.0	3700	160000	1.6	175	Yes	LTHA	Automotive	Medium impact, low blush
<i>Pro-fax</i>	SG702	18	3000	150000	N.B.	183	Yes		Automotive, Containers, Sports, Leisure, & Toys	Excellent stiffness / impact balance
<i>Pro-fax</i>	SG722	25	3300	150000	N.B.	210	Yes	N, A, S	Sports, Leisure, & Toys, Housewares, Containers	High flow, high impact, high gloss
<i>Pro-fax</i>	SB891	35	3800	180000	1.0	195	No		Automotive	Medium impact
<i>Pro-fax</i>	SD242	35	4100	210000	0.9	235	Yes	N	Automotive	Medium impact
<i>Pro-fax</i>	SG802N	35	3100	160000	2.3	219	Yes	N	Automotive	High MFR, high stiffness / impact balance
<i>Pro-fax</i>	SG899	35	3100	155000	3.9	210	No	N	Automotive interior parts	High MFR, high stiffness / impact balance
<i>Pro-fax</i>	EP501V	100	3800	190000	0.8	210	No		Compounding	Lightly stabilized
<i>Pro-fax</i>	SC973Y	107	3800	205000	0.7	243	No	N, A	Thin wall injection molding	Higher impact version of SC973
Random Copolymers										
<i>Pro-fax</i>	SR257M	2.0	4300	140000	7.0	165	No	C, A	Packaging, Bottles, Clear Containers, Cast Film	Excellent clarity
<i>Pro-fax</i>	RP320N	12	4000	135000	0.9	170	No		Cast film, foam beads, Extrusion Coating	Heat weldability

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Mobility and transportation

Catalloy

Within each section, grades are listed in order of fabrication process, then increasing melt flow rate (MFR)

Fabrication Process	Trade name	Grade name	Melt Flow Rate (2.16 kg, 230°C) (g/10min) ISO 1133	Flexural Modulus (MPa) ISO 178	Tensile Stress at Break (MPa) ISO 527	Shore D Hardness (15 seconds) ISO 868	HDT (°C) (0.45 Mpa) ISO 75	VICAT (A50, °C) ISO 306	Charpy Notched Impact Strength (23°C) (kJ/m2) ISO 179	Charpy Notched Impact Strength (-20°C) (kJ/m2) ISO 179	Charpy Notched Impact Strength (-40°C) (kJ/m2) ISO 179	Typical Conversion Process(s)	Typical Customer Application
Blow Molding	Hifax	CA 10 A	0.6	90	11	30	40	60	NB	110	5	Sheet Extrusion, Compounding, Calendaring	Roofing Membrane, Geomembrane, Automotive
Blow Molding	Adflex	Q 302 B	0.9	350	10	38	52	67	70	98	3.2	Blow Molding	Tubes, Bottles
Blow Molding	Hifax	CA 138 A	2.8	500	10	41	58	90	70	100	50	Compounding	Automotive
Blown Film	Adflex	KS 021 P	0.9	350	10	38	52	67	70	98	3.2	Blown Film, Sheet Extrusion, Compounding	Automotive, Flexible Packaging
Calendaring	Hifax	CA 10 A	0.6	90	11	30	40	60	NB	110	5	Sheet Extrusion, Compounding, Calendaring	Roofing Membrane, Geomembrane, Automotive
Calendaring	Adflex	KS 021 P	0.9	350	10	38	52	67	70	98	3.2	Blown Film, Sheet Extrusion, Compounding	Automotive, Flexible Packaging
Cast Film	Adflex	KS 311 P	9.5	530	15	46	53	112	59	4.1	1.4	Cast Film, Compounding	Roofing Membrane, Automotive
Compounding	Hifax	CA 10 A	0.6	90	11	30	40	60	NB	110	5	Sheet Extrusion, Compounding, Calendaring	Roofing Membrane, Geomembrane, Automotive
Compounding	Adflex	KS 021 P	0.9	350	10	38	52	67	70	98	3.2	Blown Film, Sheet Extrusion, Compounding	Automotive, Flexible Packaging
Compounding	Hifax	CA 138 A	2.8	500	10	41	58	90	70	100	50	Compounding	Automotive
Compounding	Hifax	CA 207 A	7.5	550	22	46	58	94	65	45	5	Compounding, Injection Molding	Automotive
Compounding	Adflex	KS 311 P	9.5	530	15	46	53	112	59	4.1	1.4	Cast Film, Compounding	Roofing Membrane, Automotive
Compounding	Hifax	7430 XEP	18.5	1200	14	55	90	131	14	6.7	2.8	Compounding, Injection Molding	Automotive
Compounding	Hifax	CA 387 A	18.5	1000	13	52	80	120	60	8.7	2.6	Compounding, Injection Molding	Automotive
Foaming	Hifax	CA 5010 A	0.9	800	30	65	70	145	95	10	5	Foaming	Foamed articles
Injection Molding	Hifax	CA 207 A	7.5	550	22	46	58	94	65	45	5	Compounding, Injection Molding	Automotive
Injection Molding	Adflex	KS 311 P	9.5	530	15	46	53	112	59	4.1	1.4	Cast Film, Compounding	Roofing Membrane, Automotive
Injection Molding	Hifax	7430 XEP	18.5	1200	14	55	90	131	14	6.7	2.8	Compounding, Injection Molding	Automotive
Injection Molding	Hifax	CA 387 A	18.5	1000	13	52	80	120	60	8.7	2.6	Compounding, Injection Molding	Automotive
Sheet and Profile Extrusion	Hifax	CA 10 A	0.6	90	11	30	40	60	NB	110	5	Sheet Extrusion, Compounding, Calendaring	Roofing Membrane, Geomembrane, Automotive
Sheet and Profile Extrusion	Adflex	KS 021 P	0.9	350	10	38	52	67	70	98	3.2	Blown Film, Sheet Extrusion, Compounding	Automotive, Flexible Packaging
Sheet and Profile Extrusion	Hifax	CA 138 A	2.8	500	10	41	58	90	70	100	50	Compounding	Automotive

Fabrication Process	Trade name	Grade name	Melt Flow Rate (2.16 kg, 230°C) (g/10min) ISO 1133	Flexural Modulus (MPa) ISO 178	SIT (°C) Internal Method	Tm (°C) Internal Method	HDT (°C) (0.45 Mpa) ISO 75	VICAT (A50, °C) ISO 306	Haze (50 µm) ASTM D1003	Gloss (45°, 50 µm) ASTM D2457	Typical Customer Application
Foaming	Hifax	CA 5075 A	7.5	600	115	133	65	115	0.5	90	Foamed articles

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Abbreviation Information

A	Antistat
AB	Antiblock
C	Clarified
EMI	Estimated Melt Index
ESCR	Environmental Stress Crack Resistance
EXT	Extrusion
HIC	Household & Industrial Chemicals
HLMI	High Load Melt Index (21.6 kg)
ISBM	Injection Stretch Blow Molding
LTHA	Long Term Heat Aging
LWCO	Low Water Carry Over
N	Nucleation
n.a.	Not Applicable
N.B.	No Break
PEX	Crosslinked Polyethylene
S	Slip
TBD	To Be Determined
TWIM	Thin-Walled Injection Molding
UVI	Ultra Violet Index
WC	Wire and Cable Additive package

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