



tomorrow's
performance
today

ExxonMobil performance polyethylene

ExxonMobil™ LDPE Product finder – Europe, Africa & Middle East

ExxonMobil's broad portfolio of low-density polyethylene (LDPE) resins allows you to optimize your ExxonMobil's performance PE solutions. Ranging from 0.913 to 0.934 g/cm³, they are suitable to produce a large variety of general-purpose applications along with being excellent blend partners in high-performance applications, which include blown and cast film, extrusion coating, rotational and injection molding.

ExxonMobil™ LDPE portfolio can help meet your needs offering:



Film applications		Grade name	Add packs	Properties								Applications										Features	
				Density (g/cm³)	Melt index (g/10min) (190°C, 2.16kg)	Vinyl acetate content (%)	DSC melting temperature (°C)	MD, 1% secant (MPa)	TD, 1% secant (MPa)	Haze (%)	Gloss 45° (GU)	Agricultural & construction film	Collation/shrink heavy duty bags	Shrink & stretch hood	FFS packaging	Lamination film	Freezer film	Bread & produce bags	High clarity film	Label & protective film	Hygiene		Over-wrap film
Homo-polymer LDPE	Medium density	LD 157	CW	0.931	0.60	-	116	340	390	7.0	65		•	•	•		•	•	•				Stiffness, printability for labels, medium duty shrink film.
		LD 380	BA	0.931	1.9	-	116	350	400	5.9	69				•		•	•	•	•	•		High stiffness, good toughness and optical properties. Suitable for breathable diaper backsheet.
		LD 152	BW	0.933	2.2	-	116	360	400	5.9	71						•	•	•	•	•		High stiffness. For thicker films.
		LD 151	BW, GZ, HR	0.934	3.0	-	116	370	370	6.0	73						•	•	•	•	•		High clarity and high stiffness. Easy tear in MD and TD.
	Lamination	LD 185	BW, JD	0.923	2.0	-	110	210	240	6.3	65				•	•							Good optical properties and sealing, narrow specifications to deliver high consistency in lamination.
		LD 158	BW, JD	0.925	2.0	-	111	240	280	5.0	69				•	•	•	•					Especially designed for lamination. Very low gel level. Narrow specifications to deliver high consistency in lamination.
		LD 156	BW, HE	0.926	0.75	-	112	260	290	6.9	64		•	•	•	•	•						Especially designed for lamination. Very low gel level. Lower MI for thicker film. Narrow specifications to deliver high consistency in lamination.
	Film	LD 165	BW1	0.922	0.33	-	109	230	280	15	45	•	•	•									For high thickness films requiring lot of melt strength. Co-extrusion partner (in core layer) for easy processing and bubble stability. High shrink speed, holding force, balanced MD/TD shrink.
		LD 100	AC, BR, BW	0.923	2.0	-	110	210	230	6.1	63				•	•	•					•	Co-extrusion partner (up to 10%) in skin layer for improved surface haze.
		LD 150	AC, BW	0.923	0.75	-	110	240	280	8.4	59	•	•	•	•	•					•	Co-extrusion partner in skin layer for improved surface haze. Co-extrusion partner in core layer for melt strength.	
LD 159		AC	0.924	1.2	-	110	240	280	8.5	62		•	•	•	•							Good drawdown combined with mechanical strength.	
LD 104		BR	0.925	2.0	-	111	260	320	7.4	62				•	•	•	•					Good optical properties combined with increased stiffness.	
LD 144		BR	0.927	3.1	-	112	260	310	6.2	72				•	•	•	•				•	Excellent optical properties combined with increased stiffness and drawdown properties.	
LD 171		BA	0.929	0.55	-	114	280	320	6.0	69		•						•				Good film rigidity combined with very good optical properties.	
	Nexxstar™ LDPE-00328	-	0.929	0.35	-	115	300	370	9.2	55	•	•						•				Good film rigidity combined with good optical properties, making it suitable for high performance collation shrink.	
Low VA LDPE	LD 368	HD, ON	0.924	1.5	2.5	106	160	180	6.8	63				•	•							High clarity EVA grade, offering good optical properties combined with toughness and impact resistance.	
	LD 358	BW	0.926	0.28	4.0	104	170	200	12	47	•	•		•	•							Offers a combination of excellent sealability and toughness even at low temperatures. Provides high melt strength.	
	LD 361	BW, HF	0.926	0.50	4.2	103	160	190	14	41	•			•	•	•						Offers good mechanical and sealing properties.	
	LD 362	BR, BW, HE, ON	0.928	2.0	4.5	104	170	200	6.9		•			•	•	•						Offers very good optical properties combined with good mechanical and sealing properties.	
	LD 363	BR, BW	0.928	3.0	4.5	103	140	170	5.6	65				•	•						•	Offers very good optical properties combined with good optical and mechanical properties.	
	LD 364	HE	0.928	0.60	5.0	104	170	200	9.8	52				•	•	•	•						Offers good combination of mechanical, optical and sealing properties.
		Nexxstar™ low EVA-00111	-	0.928	0.50	7.5	100	110	130	9.4	52	•		•									Designed for stretch hood.

Wire & Cable		Grade name	Add packs	Properties											Applications				Features		
				Density (g/cm³)	Melt index (g/10min) (190°C, 2.16kg)	Narrow Pellet appearance spec	DSC melting temperature (°C)	Flexural modulus, 1% secant (MPa)	Shore D	Tensile strength at yield (MPa)	Tensile strength at break (MPa)	Elongation at yield (%)	Elongation at break (%)	Volume resistivity (ohms.cm)	Dielectric constant	Dissipation factor	LV silane	MV peroxide		HV peroxide	Telecom / data / LAN cable insulation
	LD 101	BA	0.923	2.0	YES	110	290	50	11	13	20	570	7.6 E+16	2.2	5 E-4			•	•		Non-stabilized and excellent cleanliness LDPE grade especially designed for W&C

Molding and compounding		Grade name	Add packs	Properties							Applications						Features			
				Density (g/cm³)	Melt index (g/10min) (190°C, 2.16kg)	DSC melting temperature (°C)	Tensile modulus at 1.0 mm/min, type 1A (MPa)	Vicat softening temperature (°C)	Shore D hardness	Tensile stress at 100% strain at 50 mm/min, type 1A (MPa)	Caps & closures	Food containers	House-ware	Toys	Compounding	Masterbatch		Artificial flowers	Carpet backing	
	LD 655	-	0.913	150	99	100	72	39	6.8						•	•			•	A very high flow grade with very good flexibility. Can be added to low-flowing grades to improve processability.
	LD 654	-	0.913	70	100	110	75	40	7.1						•	•	•		•	High flow grade with very good flexibility. Can be added to low-flowing grades to improve processability.
	LD 650	-	0.914	22	102	120	79	41	8.2	•	•	•	•	•	•	•				An easy flow grade with good flexibility and excellent toughness.
	LD 653	-	0.924	22	108	200	90	46	9.4	•	•	•	•	•	•	•				An easy flow grade with medium stiffness and good toughness.
	LD 600	BA	0.924	21	108	190	90	45	9.4	•	•	•	•	•	•	•				A high flow grade, characterized by high stiffness, good toughness and easy processability.
	LD 605	BA	0.924	6.5	106	160	89	45	9.7		•	•			•	•				A general purpose grade, characterized by good stiffness, good toughness and easy processability.

Extrusion coating	Grade name	Add packs	Properties							Applications					
			Density (g/cm ³)	Melt index (190°C, 2.16kg)	DSC melting temperature (°C)	Draw down at 315°C, 35 RPM (m/min)	Neck-in at 25 m/min, at 315°C, 35 RPM (cm)	Neck-in at 50 m/min, at 315°C, 35 RPM (cm)	Neck-in at 100 m/min, at 315°C, 35 RPM (cm)	Neck-in at 200 m/min, at 315°C, 35 RPM (cm)	Food packaging	Liquid packaging	Industrial packaging	Thermal lamination	Document plastification
	LD 259	-	0.915	12	103	420	-	-	4.6	4.4	●	●	●	●	●
	LD 250	-	0.916	5.0	104	130	2.5	-	3.1	-	●	●	●	●	●
	LD 251	-	0.916	8.0	104	230	-	4.0	3.8	-	●	●	●	●	●
	LD 258	-	0.919	8.2	105	390	-	-	4.8	4.4	●	●	●	●	●
	LD 252	-	0.923	3.8	108	280	-	4.8	4.3	-	●	●	●	●	●
Features															
	LD 259	Extrusion coating and lamination grade designed for non-woven substrates with the right balance between adhesion and flexibility with easy processability, good neck-in / draw down balance and excellent heat sealing													
	LD 250	Low speed extrusion coating and lamination grade providing very low neck-in and good heat seal properties.													
	LD 251	Extrusion coating and lamination grade offering good balance low neck-in/DD, for food and liquid packaging with demanding heat seal applications.													
	LD 258	High speed, thin weight extrusion coating and lamination grade offering superior organoleptic properties reflecting our in depth knowledge of the influence of the process and resin parameters on odor and off-taste properties.													
	LD 252	High speed coating grade with good MVTR barrier properties.													

ExxonMobil™ LDPE additive package target values

Masterbatch	AC	BA	BR	BW	BW1	CW	GZ	HD	HE	HF	HR	JD	ON
Thermal stabilizer	●		●	●	●	●	●	●	●	●	●		●
Antiblock target (ppm)	450		1000				1000	1800	1500	1500	400	1800	1750
Slip content (ppm)	500		750				1050	650	550	833	650	330	

Test	Test method
Density	ASTM D1505
Melt Index (190°C/2.16kg)	ASTM D1238
Peak melting temperature	ExxonMobil method
Tensile strength	ASTM D882 / ASTM D638
Elongation at yield	ASTM D638
Elongation at break	ASTM D882 / ASTM D638
Secant modulus	ASTM D882 / ASTM D790
Optical properties	ASTM D2457 / ASTM D1003
Durometer hardness (shore D)	ASTM D2240

Test	Test method
Volume resistivity	ASTM D257
Dielectric constant	ASTM D150
Dissipation factor	ASTM D150
Vicat softening temperature	ISO 306
Tensile modulus	ISO 527-2/1A/1
Tensile stress	ISO 527-2/1A/50
Shore hardness	ISO 868
Draw down	ExxonMobil method
Neck-in	ExxonMobil method



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