Performance polyethylene

Exceed™ S PE resins for so much, so simply

When your applications are so demanding a compromise between stiffness and toughness cannot be accepted, and easy processability is essential, Exceed S PE resins are the solution that elevates performance, while simplifying operations.

Exceed[™] XP PE resins for extreme performance

If your applications are highly demanding, Exceed XP PE resins offer the mechanical properties needed to truly deliver extreme performance.

Exceed™ PE resins for sealability and optical performance

For your applications that need a combination of outstanding sealing and best-in-class optical properties, Exceed PE resins are the answer.

Enable™ PE resins for easy processability

When you are looking for more stable operations and better line output, Enable PE resins deliver excellent processability and bubble stability with HAO properties in a single resin.

Exact™ plastomer resins

Enhance heat-sealing performance and toughness in film application.

Alternative PPA PE

ExxonMobil has developed performance PE products with an alternative non-fluoropolymer polymer processing aid (PPA). Please contact your ExxonMobil representative for availability.

Specialty copolymers

Escorene[™] Ultra EVA ExxonMobil[™] EVA

For agricultural, photovoltaic cell encapsulation and packaging. Enhances sealing performance in packaging.

Escor™ EAA

For powerful adhesion to metal and metal substrates.

ExxonMobil™ EnBA

For adhesion to polar substrates, without the need for primers.

Optema[™] EMA

For softness, thermal stability and chemical adhesion.

LLDPE, LDPE, HDPE resins

LLDPE resins

If your applications need an optimal balance of toughness and stiffness, specify ExxonMobil™ and ExxonMobil™ NTX linear low-density polyethylene (LLDPE) resins.

LDPE resins

For your applications that require a combination of high melt strength, excellent optical properties, and outstanding shrink performance, turn to ExxonMobil™ low-density polyethylene (LDPE) resins.

HDPE resins

When your applications need a balanced combination of processability, toughness and stiffness, our highdensity polyethylene (HDPE) resins are the solution.

HDPE resin for MDO films

ExxonMobil has developed a novel high density polyethylene (HDPE) grade, ExxonMobil™ HD7165L, for Machine Direction Oriented (MDO) PE film applications. Designed for recyclability*, HD7165L can help converters create mono-material laminates to replace multi-material laminate structures which can be difficult to mechanically recycle. Offering excellent optical properties and outstanding mechanical properties, ExxonMobil™ HD7165L is well suited to help enable mono-material laminated packaging.

Paxon™ HDPE resins

If your rigid applications need a stepchange in ESCR (Environmental Stress Cracking Resistance) performance without compromising stiffness, impact, top load, or processability, Paxon HDPE resins are a perfect choice.

Test	Based on test method						
Density	ExxonMobil method						
Melt index (190°C/2.16 kg)	ExxonMobil method						
Melt flow rate (MFR)	ExxonMobil method						
Peak melting temperature	ExxonMobil method						
Tensile strength	ExxonMobil method						
Elongation at break	ExxonMobil method						
Secant modulus	ExxonMobil method						
Dart drop impact	ExxonMobil method						
Elmendorf tear strength	ExxonMobil method						
Puncture force	ExxonMobil method						
Puncture energy	ExxonMobil method						
Puncture at 250% stretch,							
(on highlight tester, for rel. comparaison only)	ExxonMobil method						
Cling force	ExxonMobil method						
Unwinding noise	ExxonMobil method						

Contact us to discuss your needs, visit exxonmobilchemical.com/pe



Exceed[™] S Exceed[™] XP Exceed[™] Enable[™] Exact[™]





Performance polyethylene Product finder

Explore our industry leading Exceed™ S, Exceed™ XP, Exceed™, Enable™ and Exact™ performance polyethylene (PE) resins, which have been designed for a broad range of applications.

■ Exceed S PE resins for so much, so simply

Exceed S resins enable converters to rethink film design for simpler solutions. These resins deliver industry leading combinations of stiffness and toughness, while being easy to process. Exceed S polyethylene resins provide opportunities to reduce the complexity of film formulations and designs, while improving film performance, conversion efficiency, and packaging durability. Ideally suited for flexible films used in food, industrial and agricultural applications, converters benefit from:

- High performance with easy processing
- Stiffness and toughness with less blending
- Resin solutions that simplify operations and improve film and package durability
- Low melt pressure and high output on most blown film lines

■ Exceed XP PE resins for extreme performance

Exceed XP PE resins offer mechanical properties that allow converters to manufacture extremely damage-resistant films for highly demanding applications. Film formulations can be designed to provide extreme performance, while helping to manage costs through to the end-user.

- Extreme flex-crack and dart impact resistance
- Exceptional aged property retention
- Outstanding machine direction (MD) tear strength
- Enhanced flexibility and sealability

■ Exceed PE resins for sealability and optical performance

Exceed PE resins enable converters to manufacture films with a combination of outstanding sealing and best-in-class optical properties like high gloss and transparency. Due to the toughness and impact resistance delivered by Exceed PE resins, thinner films are possible, helping to reduce working capital requirements due to material savings and reduced inventory levels.

- Sealing performance and gloss and transparency
- Toughness, strength and impact resistance

■ Enable PE resins for easy processability

Enable PE resins deliver optimized performance by combining excellent processability and bubble stability with HAO properties in a single resin for more stable operations and better line output.

- Excellent processability and operational stability
- Higher output and downgauging potential

■ Exact plastomer resins to boost toughness, clarity and sealing performance in flexible packaging

Exact plastomer resins are designed to provide key performance properties in both monolayer and multilayer blown film applications, such as food packaging, laminated films and multilayer packaging film. Produced using ExxonMobil's proprietary metallocene technology, these high-performance plastomers can be blended with polyolefins to enhance heat-sealing performance and toughness in film applications.



^{© 2023} ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.



Produ finder	ıct	Meltindex	Densit.	M_{SL}	ov ratio (MFR)	ak melting temperature (o.	'ensile strength at br.	Tensile strength as ,	Elongation at b.	Elongatios	Secant mo.	Secant m.	Dart drop :	$E^{(p)}$	Elmendorf.	Puncture s	Puncture S	Flexible food	Liquid packaging	Medium and heavy duty saci	Overwan	Soft-shrink packaging	Collation shrink Packan:	Streetch packaging	Other Fil.	Agricultural &	$G_{eomembranes}$	thygiene "s aqua/thick liners	Molding & Compounding Wine	Raffia C	guige/ped/ guige/ped/ guige/ped/ guige/ped/ guige/ped/ guige/ped/ guige/ped/ guige/ped/ guige/
								Ргоре														Application	ıs								Features
Exceed™S	Exceed S 9243ML*	0.85	0.926		257	1100	00 80	000	460	690	42000	53000	480	210	540	11	28														Exceptionally high stiffness and toughness, excellent film processing
performance polyethylene	Exceed S 9272ML*		0.920			1000		000	430	660	32000		670	210	510	11	31	•							•	•					Exceptionally high toughness and stiffness, excellent film processing
polyethylene	Exceed S 9333ML*	2.0	0.925	28-31	255	9200	0 73			690	38000	48000	460	210	480	9	24	•							-	•					High stiffness, high toughness, exceptionally easy extrusion
								Ргоре														Application	ıs								Features Page 1997 1997 1997 1997 1997 1997 1997 199
Exceed™ XP	Exceed XP 6026*		0.916					700	390		26000	32000	680	60	400	15	43														Melt strength, puncture and impact resistance, toughness
performance polyethylene	Exceed XP 6056*	0.50		36-38	228			600	390	710	24000	29000	510	80	460	13	39														Extrudability on typical LDPE equipment, toughness, seal strength.
polyethylene	Exceed XP 7021ML*	0.20	0.911	-	-	1100	00 10	0000	360	600	17000	23000	1100	40	210	15	45	•								•					Bubble stability, mechanical performance, sealing performance, optical properties
	Exceed XP 7052ML*	0.50	0.912	-	-	9700	0 97	700	410	630	16000	19000	900	80	270	14	46														Bubble stability, mechanical performance, sealing performance, optical properties
	Exceed XP 8318*	1.0	0.918	28-30	250	9300	0 75	500	370	660	28000	33000	670	370	470	10	29								•	•					Stiffness, impact resistance, extrudability and higher heat resistance.
	Exceed XP 8346	3.5	0.916	-	-	7000	0 55	500	500	680	18000	18000	290	280	350	8	34											•			Processability, puncture, toughness
	Exceed XP 8358*	0.50	0.918	28-30		1000	00 79	900	300	640	29000	36000	710	530	500	12	33														Stiffness, impact resistance
	Exceed XP 8656*			28-30				300		640	27000	33000	750	500	540	12	30														Flex-crack, dart resistance, bubble stability
	Exceed XP 8784*	0.80	0.914	28-32	250	9200	0 80	000	330	620	24000	31000	910	310	460	12	37	•													Easy extrusion, bubble stability, step-out mechanical performance, excellent sealing performance
								Ргоре	erties													Application	S								Features
Exceed™	Exceed 1012*	1.0	0.912	-	238	8300	0 80	000	450	600	17000	18000	900	200	310	13	47														Low temperature toughness, sealing, impact and puncture resistance
performance polyethylene	Exceed 1015*	1.0	0.915	-	242	9300	0 82	200	470	620	21000	24000	740	210	360	12	40														Low temperature toughness, impact strength and puncture, heat sealing and hot tack performance
ooiyetiiylelle	Exceed 1018*	1.0	0.918	-	245	8500	0 77	700	480	640	27000	29000	590	250	430	11	35	•							•	•					Tensile, impact strength, puncture
	Exceed 1023*	1.0	0.923	-	250	7300	0 59	900	510	600	33000	35000	300	280	510	10	19														Tensile, impact strength, puncture and excellent drawability
	Exceed 1327*	1.3	0.927	-	253	8300	0 73	300	600	700	45000	52000	140	160	430	11	27	•													Tensile, stiffness, impact strenght, puncture, drawability
	Exceed 1518*	1.5	0.918	-	244	8600	0 79	900	540	660	26000	28000	610	300	430	12	38														Tensile, impact strength and puncture and excellent drawability
	Exceed 2018*		0.918	-	243			000	590	690	24000	27000	580	330	460	11	37														Extrudability, tensile, impact strenght, puncture
	Exceed 2718	2.7	0.918	-	243	1100	00 74	400	470	720	16000	19000	200	170	420	11	37														Tensile, impact resistance, puncture toughness, for cast film
	Exceed 3518	3.5	0.918	-	237	1100	00 68	800	510	680	16000	18000	140	190	500	11	38														Tensile, impact resistance, puncture toughness, for cast film
	Exceed 3527		0.927	-	250	8900	0 59	900	530	750	27000	30000	60	70	400	10	23														Stiffness, tensile, impact and puncture resistance
	Exceed 3812	3.8	0.912	-	230	6900	0 63	300	450	610	13000	14000	610	250	440	-	-														Sealing, caulkability, toughness, impact and puncture resistance, for cast film
	Exceed 4518	4.5	0.918	-	237	9700	0 70	000	500	730	15000	18000	140	150	460	11	39														Tensile, impact resistance, puncture toughness, for cast film
	Exceed 4536	4.5	0.936	-	257	6200	0 48	800	580	720	54000	58000	<60	30	110	6	9.9														Processability, stiffness, toughness, mechanical performance, hot-tack, for cast film
	Exceed 0015	15	0.918	-	235	-		-	-	-	-	-	-	-	-	-	-														Organoleptics, toughness, for extrusion coating and injection molding
	Exceed 0019 ^A	19	0.918	-	237	-		-	-	-	-	-	-	-	-	-	-														Organoleptics, toughness, for extrusion coating and injection molding
								Ргоре	erties													Application	ıs								Features Features
Enable™	Enable 2005*	0.50	0.920	-	239	8800	0 80			710	30000	29000	240	90	510	12	33														Processablility, toughness, cast film available
erformance	Enable 2010*	1.0	0.920	-								33000		130	550	11	28														Processablility, toughness, cast film grade available
polyethylene	Enable 2305*	0.50	0.923	-	241	8400	0 76	600		730	35000		170	70	620	12	29														Processability, toughness, antiblock options available
	Enable 2703*	0.30	0.927	-	246	9100	0 75	500	480	750	45000	55000	140	40	670	11	25														Stiffness, toughness, processability
	Enable 2705*	0.50	0.927	-	246	8300	0 72	200	520	760	44000	52000	130	50	730	11	24														Processability, stiffness and toughness
	Enable 3505*	0.50	0.935	-	253	8400	0 67	700	550	790	62000	75000	70	20	610	11	20														Processability, stiffness and toughness, shrink
	Enable 4002*	0.25	0.940	-	262	9700	0 70	000	490	810	78000	110000	60	10	600	11	19														Bubble stability, melt strength, stiffness, shrink
	Enable 4009*	0.90		-			0 63	300	600	830	74000	86000		20	550	8	8.7														Extrudability, stiffness and toughness
	Enable 9365*			_										-	-	-	-														Outstanding balance between extrusion processing and properties, including hydrostatic strength
								Ргоре														Application	s								Features
Exact™	Exact 3236*	2.0	0.908	_	237	8600	0 83			570	13000	13000	800	210	280	13	56														Low seal initiation temperature and high toughness
	Exact 3237*												800																		Low seal initiation temperature and high toughness with slip and anti-block added
lastomer	EXACT 525/"	/ ()	0.700																												

Film properties are represented according to additive used and may vary according to additive package requirements. Products may not be available in one or more countries — please contact your Sales Representative for more information. See product data sheets for additional typical properties. Typical properties are not to be construed as specifications. All film conditions and test methods are specified in the product data sheets. Formulations and conditions will change depending on your application and formulation. Film gauge: 1 mil film for blown grades, 0.8 mil for cast grades.

A: Exceed 0019 product properties data available at **exxonmobilchemical.com**B: Dart drop impact is based on ASTM D1709A, which may vary by country.

^{*} Please contact your ExxonMobil representative for availability of products containing alternative polymer processing aid (PPA) PE