# POLYETHYLENE PRODUCT PORTFOLIO

**POCKET REFERENCE GUIDE** 



## **Westlake** Polyethylene<sup>™</sup>



Westlake produces the industry's most comprehensive selection of LDPE extrusion coatings resins, which can be coated onto a variety of substrates to create products for food, medical, and liquid packaging, food service, and a variety of other applications.

#### TRUCOAT® - LDPE

Grade	MI (g/10 min)	Density (g/cm³)	Typical Applications
EC1550	3.5	0.917	Food & medical packaging
EC1924	4.2	0.923	
EC472	5.0	0.923	Paper coating for liquid
EC4041	5.6	0.922	packaging, cups, folding cartons
EC479	5.7	0.9215	
EC808	7.0	0.917	General purpose extrusion coating and laminating
EC474	8.0	0.918	Light weight extrusion coating and laminating
EC4042	10.0	0.917	
EC850	12.5	0.915	High speed coating applications
EC1390	15	0.915	appeditorio
EC4056	80	0.909	Carpet backing,
EC812	200	0.909	blending

#### TRUCOAT® - HDPE

Grade	MI (g/10 min)	Density (g/cm³)	<b>Typical Applications</b>
MC2004	10.0	0.946	Release paper, spiral round tan linings, grease barrier applications



## LDPE FOR FILM AND INJECTION MOLDING APPLICATIONS

Westlake offers a broad range of film and injection molding LDPE for a variety of applications.

#### LDPE - FILM

Grade	MI (g/10 min)	Density (g/cm³)	Typical Applications
EF600	0.18	0.920	
EF601	0.25	0.919	Heavy duty bags,
EF602	0.60	0.919	industrial shrink film
EG617	0.75	0.922	& bubble stabilizers
EF403	0.80	0.924	
EF603	1.2	0.919	Medium duty shrink film
EF412	2.0	0.923	Clarity film
EF606	2.2	0.919	Trash bags
EF706	2.3	0.923	Foam & cast film
EF612	2.5	0.920	Clarity film
EP413	3.0	0.923	
EG736	3.0	0.923	Bakery bags & cast film
EG378	4.0	0.922	
EF677	7.0	0.919	Foams
EF608	9.5	0.919	Compounding base

#### LDPE - INJECTION MOLDING

Grade	MI (g/10 min)	Density (g/cm³)	Typical Applications
EN1807	0.7	0.921	
EN1817	1.7	0.920	
EM800	1.7	0.918	Food & medical
EM1550	3.5	0.918	packaging
EM808	7.0	0.917	
EM1870	7.4	0.921	
EM182	20	0.920	Fitments & personal hygiene
EM812	200	0.909	Surgical scrub brushes





Westlake produces both butene and hexene LLDPE copolymers for food, consumer, and industrial films. The extensive LLDPE portfolio includes general purpose, high clarity and high performance grades.

#### HIFOR® LLDPE - BUTENE

Grade	MI (g/10 min.)	Density (g/cm³)	Typical Applications
LF1020	1.1	0.919	Trash bags
LF1022	1.1	0.918	Food storage bags
LF1040	2.0	0.919	Stretch wrap
LF1030	2.6	0.919	Cast stretch film
LF1050	3.5	0.925	Cast film

#### HIFOR XTREME® - HEXENE

Grade	MI (g/10 min.)	Density (g/cm³)	Typical Applications
SC74858	0.50	0.917	High strength film
LF74849	0.55	0.925	Shrink film
SC74875	0.75	0.915	Hoave duty film
SC74874	0.85	0.917	Heavy duty film
SC74873	0.85	0.918	Trash bags



#### **HIFOR® LLDPE - HEXENE**

Grade	MI (g/10 min.)	Density (g/cm³)	Typical Applications
LF2005	0.5	0.9155	High strength film
LT74159	0.5	0.920	Agricultural film
LF74859	0.6	0.925	High strength film
LF2020	1.0	0.919	General purpose film
LT74104	1.0	0.920	General purpose Illin
LF2041	2.0	0.918	Cast film
LF2051	3.5	0.918	Cast IIIII

#### HIFOR CLEAR® LLDPE - HEXENE

Grade	MI (g/10 min.) Density (g/cm <sup>3</sup>		<b>Typical Applications</b>
LF74580	0.6	0.925	High strength film
LF74563	0.8	0.922	Bakery film
SC74558	1.0	0.920	Frozen food film





The MXSTEN® portfolio of LLDPE plastomer resins offers the following benefits in multilayer barrier and high performance films:

- · Superior melt strength, processability, and bubble stability.
- Outstanding dart impact, tear properties, and puncture resistance, even at cold temperatures.
- Enhanced recycle incorporation and down-gauging for more sustainable film options.

#### **MXSTEN® PLASTOMER**

Grade	MI (g/10 min.)	Density (g/cm³)	Typical Applications
CV77541	0.5	0.906	Blown film & extrusion
CV77525	0.5	0.906	Blown film, suitable for E-beam post treatment
CV77526	0.7	0.910	Blown film
CV77516	1.0	0.910	Cast & blown film
CV77528	2.0	0.910	Cast o blown ham





The TYMAX® portfolio enables barrier solutions across multiple substrates, processes, and applications.

- · Multiple maleic-grafted base polymers.
- · Customization capability.
- Technology to tie to EVOH, Nylon, and PET.

#### **TYMAX® FULLY FORMULATED**

Grade	MI (g/10 min.)	Density (g/cm³)	Base Polymer	Typical Adhesive Application	Fabrication Method
GT1004 GT1057	5.0 7.5	0.923 0.917	LDPE	PE, PA, EVOH	Extrusion coating
GT4525 GT4157 GT4408 GT7058	0.75 1.0 2.3 2.7	0.910 0.920 0.919 0.943	Plastomer LLDPE LLDPE EMAC®	PE, PA, EVOH PE, PA PE, PA, EVOH PE, PET, PA, EVOH	Blown & cast film
GT4612	3.6	0.923	LDPE	PE, PA, EVOH	
GT7001 GT7501	6.0 7.0	0.942 0.942	EMAC®+	PE, PET, PA, EVOH	Extrusion coating

#### TYMAX® HIGHLY FUNCTIONALIZED

Grade	MI (g/10 min.)	Density (g/cm³)	Base Polymer	Typical Adhesive Application	Fabrication Method
GT4300	8.0	0.918	LLDPE	PE, PA, EVOH	Blown &
GT7000	10.0	0.951	EMAC®	PE, PET, PA, EVOH	cast film





ELEVATE® is a full line EVA portfolio with resins suitable for films, thermal laminations, hose and tubing applications, blow-molded bottles, cap liners, foams, and hot melt adhesives.

#### **ELEVATE® EVA**

Grade	MI (g/10 min.)	VA %	Typical Applications
EF437	2.0	2.5	High clarity packaging
EF439	1.4	4.0	High impact film
EF546	2.0	6.0	Foams
EF561	0.55	6.5	Frozen food packaging
EB591	2.0	9.0	Tubing
EF510	0.55	10.0	Frozen food packaging
EF532	8.0	12.0	Thermal lamination
EB502	0.55	12.5	Heat seal layer
EF526	15	16.0	Extrusion coating
EF539	30	18.0	Thermal lamination
EB508	0.7	18.5	Heavy duty bags
EF528	2.5	18.5	Tubing
EM531	500	18.5	Hot melt adhesives
EF206	6.0	20.0	Meat & poultry
DR281	25	28.0	Solar film
EM280	6.0	28.0	
EM283	150	28.0	Hot melt adhesives
EM284	400	28.0	not meit adnesives
DS285	850	28.0	







Westlake produces random ethylene methyl acrylate (EMAC®), blocked ethylene methyl acrylate (EMAC+®), random ethylene butyl acrylate (EBAC®), and blocked ethylene butyl acrylate (EBAC+®) copolymers. These copolymers are more elastic, offering higher flexibility at lower temperatures and higher compatibility with many polymers for enhanced physical performance and filler loadings.

#### **EMAC®**

Grade	MI (g/10 min.)	Acrylate %	Typical Applications
SP2413	0.6	16.5	
SP2255	2.1	17.0	Flexible films
SP2242	3.5	18.0	Flexible IIIIIS
SP2205	2.0	20.0	
SP2207	6.0	20.0	Extrusion coatings
SP2409	8.0	20.0	& lamination
SP2220	20	20.0	Masterbatch carrier resin
SP2408	40	20.0	Compounding
SP2202	0.45	21.0	PET impact modifier
SP2260	2.1	24.0	Tie layers to PET & PET impact modifier
SP2268	10	24.0	Compounding

#### EMAC+®

Grade	MI (g/10 min.)	Acrylate %	Typical Applications
SP1330	2.0	22.0	Tie layers to PET
SP1358	2.6	21.5	Flexible films
SP1307 SP1501	6.0 25	20.0 20.0	Compounding

#### **EBAC®**

Grade	MI (g/10 min.)	Acrylate %	Typical Applications	
SP1802	0.5	22.5	Flexible films & PET impact modifier	
SP2811	20	20.0	Solar film	

#### EBAC+®

Grade	MI (g/10 min.)	Acrylate %	Typical Applications		
SP1903	0.45	18.0	Flexible films		



Westlake offers a series of medium-to-low molecular weight polyethylene or polypropylene polymers under the EPOLENE® trade name. They are useful in the plastics industry as lubricants for PVC, processing aids, mold release agents, dispersion aids, and coupling agents. They are also widely used as base polymers for hot melt adhesives, emulsions, polymer modified asphalt for paving and roofing, and pavement-striping compounds, as well as petroleum wax modifiers for use in candles, investment casting, cable filling, and various paperboard coatings.

All EPOLENE® products come standard in pellet form. Select grades are also offered in powder form. Please contact us to learn more.

### EPOLENE® NON-EMULSIFIABLE – LOW MOLECULAR WEIGHT

Grade	Polymer Type	Soft Point (°C)	Density (g/cm³)	Viscosity @ 125°C (cP)	Viscosity @ 140°C (cP)
N-10	PE	110	0.925	1,500	1,100
N-11	PE	111	0.921	350	250
N-14	PE	108	0.920	150	100
N-15	PP	164	0.902	-	-
N-21	PE	121	0.950	600	400
N-30	PE	110	0.924	1,050	700
N-34	PE	104	0.910	450	300
N-35	PE	104	0.913	700	-



## EPOLENE® EMULSIFIABLE – OXIDIZED LOW MOLECULAR WEIGHT

Grade	Polymer Type	Soft Point (°C)	Density (g/cm³)	Acid No. (mg KOH/g)	Viscosity @ 125°C (cP)	Viscosity @ 140°C (cP)
EE-2	Ox-PE	112	0.960	17	1,500	900
E-10	Ox-PE	105	0.942	17	800	525
E-14	Ox-PE	104	0.939	17	375	260
E-14E	Ox-PE	104	0.939	17	225	160
E-16	Ox-PE	105	0.943	17	700	500
E-20	Ox-PE	112	0.960	17	1,500	900
E-43	Ma-PP	160	0.934	45	_	-

## EPOLENE® COATING – HIGHLY BRANCHED MEDIUM MOLECULAR WEIGHT

Grade	Polymer Type	Soft Point (°C)	Density (g/cm³)	Acid No. (mg KOH/g)	Viscosity @ 125°C (cP)	Viscosity @ 190°C (cP)	MI (g/10 min.)
C-10	PE	103	0.906	_	18,600	3,550	2,250
C-12	PE	118	0.907	-	212,000	31,400	400
C-13	PE	137	0.913	_	-	_	190
C-15	PE	101	0.906	_	8,950	1,800	4,200
C-16	Ma-PE	103	0.908	2	16,650	2,850	1,700
C-17	PE	>133	0.917	_	-	_	19
C-18	Ma-PE	101	0.905	2	7,750	1,550	4,200
C-23	PE	108	0.909	-	-	180,000	80
C-24	PE	-	0.912	_	_	_	58
C-26	Ma-PE	133	0.917	8	_	_	8
C-29	Ma-PE	105	0.915	4	700	_	_







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