



PROSPECTUS

POLYETHYLENE FILM MARKET ANALYSIS, VALUE-IN-USE, & TECHNOLOGIES

9TH EDITION

PUBLISHED AUGUST 2014

****Polyethylene Film Market Study 9th Edition****

Highlights

- Published in August 2014. Includes a two volume book set and an electronic version available in Excel and Adobe Acrobat formats.
- Interviews were conducted with hundreds of companies throughout North America.
- The study is divided into four major market categories: (1) Food Packaging; (2) Industrial Packaging; (3) Retail Packaging; and (4) Nonpackaging.
- The study includes an executive summary along with detailed data on 33 separate end-use markets.

Every chapter for each end-use market will provide in-depth coverage on the following topics:

- Market size by total resin consumption and by resin type.
- Major processors and their locations.
- Primary products manufactured by these major processors.
- Total resin consumption and growth rates for each PE film extruder.
- Value-in-use analysis depicting the average selling price, which includes the margin, overhead and other cost related to manufacturing the various products.
- Listing of the entire group of participating companies in order from largest to smallest.
- Detailed information on the factors that affect the growth or decline of each market. (i.e. economy, material substitution, government regulations, environmental issues, technological trends, imports, shift of production from USA to foreign countries, mergers & acquisitions, NAFTA and other world trade issues, etc.)
- Growth rate comparison between the anticipated market growth and the anticipated processor growth per the 33 end-use markets. Where there is a difference, there will be qualitative data explaining the difference.
- Current capacity utilization and projected capacity utilization in 2017.
- Inter-polymer substitution.
- Detailed appendix of additional locations along with PE Film products manufactured and resin volumes.
- What are the favorite resin(s) you use for polyethylene film extrusion? Who supplies the resin and why is it a favorite?

Selected Exhibits

Total resin by type consumed for Polyethylene Film in U.S. and Canada for 2014 and projected for 2017 in MM lbs.

	2014	2017
Resin <i>(Sample list of resins)</i>	Consumption (MM lbs.)	Consumption (MM lbs.)
LLDPE (linear low density polyethylene)		
LLDPE-hexene		
LLDPE-butene		
LLDPE-octene		
LLDPE-metallocene		
Total LLDPE		
LDPE (low density polyethylene)		
LDPE-homopolymer		
LDPE-EVA (ethylene vinyl acetate) copolymer		
LDPE-EAA (ethylene acrylic acid) copolymer		
LDPE-EMA (ethylene methyl acrylate) copolymer		
Total LDPE		
HDPE (high density polyethylene)		
HMW-HDPE (high molecular weight)		
MMW-HDPE (medium molecular weight)		
Total HDPE		
MDPE (medium density polyethylene)		
PCR (post consumer resin)		
UHDPE (ultra high density polyethylene)		
ULDPE (ultra low density polyethylene)		
GRAND TOTAL		

Source: Mastio & Company Polyethylene Film Market Study

Total resin consumption for 33 end-use markets for polyethylene film resins in U.S. and Canada for 2014 and projected for 2017 in MM lbs.

TOTAL NORTH AMERICAN PE RESIN CONSUMPTION 2014 AND 2017					
Chapter	Market	2014 Consumption (MM lbs.)	2017 Consumption (MM lbs.)	AAGR 11-14 AAGR %	Growth/Decline 2014-2017 (MM lbs.)
2	Baked Goods				
3	Meat & Poultry				
4	Fresh Produce and Self-Serve & Wet-Pack Bags				
5	Bag-In-Box				
6	Candy Packaging				
7	Deli Bags & Wrap				
8	Carton Liners & Slug Wrap				
9	Frozen Food				
10	Snack Food Packaging				
11	Cheese Packaging				
Food Packaging Subtotal					
12	Consumer & Industrial Product Liners				
13	Stretch Film				
14	Shrink Film				
15	Heavy Duty Sacks				
16	Sheet & Tubing				
17	Bubble Packaging				
18	Multi-Wall Sacks				
Industrial Packaging Subtotal					
19	Consumer Trash Bags				
20	Merchandise Bags				
21	Household Bags & Wrap				
22	Laundry, Dry Cleaning, Garment Bags				
23	T-Shirt Bags				
24	Pouches				
25	Paper and Personal Overwrap				
Retail Packaging Subtotal					
26	Institutional Trash Bags				
27	Construction Film				
28	Geomembrane Lining Systems				
29	Juvenile & Adult Hygiene Film				
30	Medical Film & Packaging				
31	Agricultural Film				
32	Drop Cloths, Tarps and Covers				
33	Envelope & Magazine Overwrap				
34	Miscellaneous				
Nonpackaging Subtotal					
Grand Total					

Source: Mastio & Company Polyethylene Film Market Study

Breakdown of resin consumption by process type.

	2014	
	Consumption (MM lbs.)	Market Share (%)
Film Extrusion Process		
Blow Film Extrusion	XXX	XXX
Cast Film Extrusion	XXX	XXX
Totals	XXX	XXX

Detailed listing of participants and their location.

Company	Location
Company A	Van Buren, Arkansas
Company B	Oshkosh, Wisconsin
Company C	St. Louis, Missouri
Company D	Paris, Illinois
Company E	Elyria, Ohio
Company F	Jacksonville, Florida

Capacity Utilization –provided in the electronic edition.

Processor	Current Utilization 2013	Anticipated Utilization 2014	Reason for increase or decline
Company A	50%	75%	
Company B	80%	70%	
Company C	75%	80%	
Company D	75%	95%	
Company E	63%	70%	
Company F	93%	87%	

What are the favorite resins that you use for PE film extrusion and who supplies them to you? – included in the electronic edition.

Resin Supplier	Why is this resin a favorite of yours?

Resin consumption, market share, and AAGR by resin type, 2014 and 2017

Resin	2014		2017		2014-2017 AAGR (%)
	Consumption (MM lbs.)	Market Share (%)	Consumption (MM lbs.)	Market Share (%)	
mLLDPE	128.3	20.4	146.4	20.7	4.4
LLDPE-octene	98.6	15.7	110.7	15.6	3.9
LLDPE-hexene	88.4	14.1	94.5	13.3	2.2
LLDPE-butene	51.9	8.3	56.6	8.0	2.9
LLDPE-super hexene	28.5	4.5	33.0	4.7	5.0
Total LLDPE	395.7	62.9	441.2	62.3	3.7
LDPE-homopolymer	61.7	9.8	73.4	10.4	5.9
LDPE-EVA copolymer	39.3	6.2	42.4	6.0	2.5
LDPE-EAA copolymer	22.9	3.6	26.3	3.7	4.6
Total LDPE	123.9	19.7	142.1	20.1	4.6
HMW-HDPE	14.4	2.3	16.9	2.4	5.4
MMW-HDPE	4.8	0.8	5.2	0.7	2.8
Total HDPE	19.2	3.1	22.1	3.1	4.8
EVOH	29.4	4.7	32.8	4.6	3.7
Nylon	22.7	3.6	26.9	3.8	5.8
PVDC	18.7	3.0	20.7	2.9	3.3
VLDPE	17.6	2.8	19.5	2.8	3.4
Tie-resin	0.9	0.1	1.7	0.2	22.6
MDPE	0.8	0.1	1.1	0.2	9.9
GRAND TOTAL	628.9	100.0	708.0	100.0	4.0

Alphabetical listing of polyethylene film processors by total resin consumption for each of the 33 end-use markets.

Polyethylene Film Processors and their Primary Markets														
Company	Total Resin Use (MM lbs.)	Market Amounts in MM lbs.												
		2	3	4	5	6	7	8	9	10	11	12	13	14
Company Name	91.6	0.6				1.0								
Company Name	72.2									0.8	0.4			0.8
Company Name	2.7	0.7					0.2	0.2	0.2					
Company Name	55.0													
Company Name	11.2												0.2	
Company Name	5.3													
Company Name	71.5													
Company Name	55.9											5.9		
Company Name	22.0				0.3			0.4		0.1				
Company Name	82.0							2.0						
Company Name	170.1		168.3	0.9	0.9									
Company Name	7.0		1.9											
Company Name	6.9													
GRAND TOTAL	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx

Source: Mastio & Company Polyethylene Film Market Study

Listing of PE Film extruders by total resin consumption (largest to smallest).

Exhibit	
2014 PE FILM ANNUAL CONSUMPTION BY COMPANY	
Note: Multi-divisional companies have been listed separately along with their parent company in brackets.	
<u>Company Names</u>	<u>Quantity (MM lbs.)</u>
Company names are not included in this prospectus	1,275.0
	702.0
	601.8
	600.0
	540.0
	484.0
	458.9
	412.1
	402.8
	385.2
	382.0
	360.0
	320.0
	319.6
	315.0
	310.5
	300.2
	300.0
	274.9
	230.2
	213.5
	209.0
	181.5
	175.0
	168.0
	166.8
	165.0
	154.0
	152.8

Source: Mastio & Company Polyethylene Film Market Study