

BLOW-MOLDED PLASTIC PACKAGING: TECHNOLOGIES AND GLOBAL MARKETS



PLS078A
March 2015

David Platt
Project Analyst

ISBN: 1-62296-067-X



BCC Research
49 Walnut Park, Building 2
Wellesley, MA 02481 USA
866-285-7215 (toll-free within the USA),
or (+1) 781-489-7301
www.bccresearch.com
information@bccresearch.com

TABLE OF CONTENTS

| TOPIC | PAGE NO. |
|---|-----------------|
| CHAPTER 1 INTRODUCTION | 2 |
| STUDY GOALS AND OBJECTIVES | 2 |
| REASONS FOR DOING THE STUDY | 2 |
| INTENDED AUDIENCE | 2 |
| SCOPE OF REPORT | 3 |
| INFORMATION SOURCES | 3 |
| ANALYST'S CREDENTIALS | 3 |
| RELATED BCC RESEARCH REPORTS | 4 |
| BCC RESEARCH WEBSITE | 4 |
| DISCLAIMER | 4 |
| CHAPTER 2 SUMMARY | 6 |
| <i>SUMMARY TABLE GLOBAL MARKET FOR BLOW MOLDED PLASTIC PACKAGING BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS)</i> | 7 |
| <i>SUMMARY FIGURE GLOBAL MARKET FOR BLOW MOLDED PLASTIC PACKAGING BY RESIN TYPE, 2013-2019 (MILLION POUNDS)</i> | 8 |
| CHAPTER 3 OVERVIEW | 11 |
| DEFINITION OF THE INDUSTRY | 11 |
| MARKET DEVELOPMENT | 12 |
| BLOW MOLDING PRODUCTION PROCESSES | 12 |
| EXTRUSION BLOW MOLDING | 13 |
| INJECTION BLOW MOLDING | 13 |
| INJECTION STRETCH BLOW MOLDING | 14 |
| COMPETING PACK TYPES | 15 |
| <i>TABLE 1 SUMMARY OF COMPETING PACK FORMATS FOR BLOW MOLDED BOTTLES AND JARS BY PRODUCT SECTOR</i> | 15 |
| CHAPTER 4 INDUSTRY STRUCTURE AND DEVELOPMENT | 18 |
| OVERVIEW | 18 |
| INDUSTRY SUPPLY CHAIN | 18 |
| INDUSTRY STRUCTURE | 18 |
| PLASTIC RESIN PRODUCERS | 20 |
| Polyethylene Terephthalate (PET) | 20 |
| <i>TABLE 2 TOP FIVE GLOBAL PET RESIN PRODUCERS, 2014</i> | 20 |
| High-Density Polyethylene (HDPE) | 22 |
| <i>TABLE 3 TOP FIVE GLOBAL HDPE RESIN PRODUCERS, 2014</i> | 22 |
| Polypropylene (PP) | 23 |
| <i>TABLE 4 TOP FIVE GLOBAL PP RESIN PRODUCERS, 2014</i> | 23 |
| PACKAGING CONVERTERS | 23 |
| Multinational Packaging Groups | 23 |
| In-House Bottle Producers | 23 |
| Independent Producers | 24 |
| Vertical Integration With Resin Production | 24 |
| <i>TABLE 5 TOP TEN GLOBAL BLOW MOLDED PLASTIC PACKAGING PRODUCERS, 2013 (\$ MILLIONS)</i> | 24 |

| TOPIC | PAGE NO. |
|---|-----------------|
| MARKET DRIVERS AND RESTRAINTS | 25 |
| <i>TABLE 6 SUMMARY OF KEY MARKET DRIVERS AND TRENDS OF BLOW MOLDED PLASTIC PACKAGING</i> | 25 |
| ECONOMIC INFLUENCES | 27 |
| SOCIAL INFLUENCES | 27 |
| Concern for Environment | 27 |
| Growing Awareness of Health and Wellness | 27 |
| Globalization and Growing Consumer Choice | 28 |
| Growing Numbers of Asset-Rich/Time-Poor Consumers | 28 |
| Rise in Number of Single-Parent Households With Children and Single-Person Households | 28 |
| Growth in Urbanization and Busier Lifestyles | 28 |
| DEMOGRAPHIC INFLUENCES | 28 |
| BARRIER PET BOTTLES | 29 |
| TECHNOLOGICAL INNOVATION | 30 |
| Hot-Fill Technology | 30 |
| Aseptic Packaging | 30 |
| Production Machinery | 31 |
| LIGHT-WEIGHTING | 31 |
| MATERIAL SUBSTITUTION | 33 |
| SUSTAINABILITY PROGRAMS OF RETAILERS AND BRAND OWNERS | 33 |
| ENVIRONMENTAL AND RECYCLING ISSUES | 34 |
| Western Europe | 36 |
| The U.S. | 37 |
| CHAPTER 5 TECHNOLOGY DEVELOPMENTS | 39 |
| INTRODUCTION | 39 |
| <i>TABLE 7 SUMMARY OF TECHNOLOGY DEVELOPMENTS FOR BLOW MOLDED PLASTIC PACKAGING</i> | 39 |
| BARRIER SOLUTIONS | 41 |
| OVERVIEW | 41 |
| MULTILAYER | 41 |
| Overview | 41 |
| <i>TABLE 8 SUMMARY OF LEADING PROVIDERS OF MULTILAYER BARRIER TECHNOLOGIES FOR BLOW MOLDED PLASTIC PACKAGING</i> | 41 |
| Multilayer Barrier Technology Suppliers | 42 |
| Honeywell | 42 |
| Amcor | 42 |
| MONOLAYER BLENDS | 42 |
| Overview | 42 |
| <i>TABLE 9 SUMMARY OF LEADING PROVIDERS OF MONOLAYER BLEND BARRIER TECHNOLOGIES FOR BLOW MOLDED PLASTIC PACKAGING</i> | 43 |
| Monolayer Blend Barrier Technology Suppliers | 43 |
| Invista | 43 |
| ColorMatrix | 44 |
| Novapet | 44 |
| Amcor | 45 |
| M&G Polymers | 45 |

| TOPIC | PAGE NO. |
|--|-----------------|
| Futura Polyester | 45 |
| APPE | 46 |
| Clariant | 46 |
| BARRIER COATINGS | 46 |
| Overview | 46 |
| <i>TABLE 10 SUMMARY OF LEADING PROVIDERS OF BARRIER COATING TECHNOLOGIES FOR BLOW MOLDED PLASTIC PACKAGING</i> | 47 |
| Barrier Coating Technology Suppliers | 47 |
| KHS Corpoplast Plasmax | 47 |
| Sidel Actis | 48 |
| HOT-FILL | 48 |
| OVERVIEW | 48 |
| RECENT HOT-FILL TECHNOLOGY DEVELOPMENTS | 49 |
| Plastipak | 49 |
| Nissei ASB | 49 |
| Krones | 49 |
| APPE | 49 |
| ASEPTIC COLD FILLING | 50 |
| OVERVIEW | 50 |
| RECENT DEVELOPMENTS IN ASEPTIC COLD FILLING | 50 |
| SIG Asbofill | 50 |
| Sidel | 51 |
| Krones | 51 |
| PROCESSING EQUIPMENT | 51 |
| OVERVIEW | 51 |
| RECENT PROCESSING EQUIPMENT DEVELOPMENTS | 51 |
| Sidel | 51 |
| Piovan | 51 |
| Netstal-Maschinen AG | 52 |
| Krones | 52 |
| KHS | 53 |
| FILLING TECHNOLOGY | 53 |
| OVERVIEW | 53 |
| RECENT FILLING TECHNOLOGY DEVELOPMENTS | 53 |
| Sidel | 53 |
| KHS | 54 |
| Krones | 54 |
| Amcor | 54 |
| RESIN TECHNOLOGY | 55 |
| OVERVIEW | 55 |
| RECENT RESIN TECHNOLOGY DEVELOPMENTS | 55 |
| Indorama | 55 |
| Invista | 55 |
| Novapet | 55 |
| Artenius PET Packaging | 56 |
| Sabir | 56 |
| ADDITIVE TECHNOLOGY | 57 |
| OVERVIEW | 57 |

| TOPIC | PAGE NO. |
|---|-----------------|
| RECENT PLASTIC ADDITIVE TECHNOLOGY DEVELOPMENTS | 57 |
| Clariant CESA-extend Additives | 57 |
| BASF Irgamod | 57 |
| PolyOne OnCap | 58 |
| Milliken Ultra Clear PP | 58 |
| Borealis Borclear | 58 |
| PET BOTTLE RECYCLING TECHNOLOGY | 58 |
| OVERVIEW | 58 |
| RECENT PET RECYCLING TECHNOLOGY DEVELOPMENTS | 59 |
| Avery Dennison CleanFlake | 59 |
| Next Generation Recyclingmaschinen | 59 |
| Kanagawa Kagaku Gijutsu Academy | 59 |
| PET Rebirth | 60 |
| Husky Injection Molding Systems | 60 |
| NEW PRODUCT DEVELOPMENT | 60 |
| OVERVIEW | 60 |
| RECENT BLOW MOLDED PACKAGING PRODUCT DEVELOPMENTS | 60 |
| Plastic Technologies Inc. | 60 |
| Unilever Introduces Foamed Plastic Bottles | 61 |
| Artenius PET Packaging Europe | 61 |
| Ampcor Rigid Plastics | 61 |
| Sidel StarLite | 61 |
| SMI | 62 |
| Kortec and Sidel | 62 |
| COMPRESSION MOLDED PET PERFORM TECHNOLOGY | 62 |
| BIOPLASTIC BOTTLES | 64 |
| OVERVIEW | 64 |
| POLYLACTIC ACID (PLA) | 64 |
| BIOPOLYETHYLENE | 65 |
| BIO-BASED PET FEEDSTOCK | 65 |
| POLYETHYLENE FURANOATE (PEF) | 65 |
| PLASTARCH MATERIAL (PSM) | 66 |
| DIGITAL DIRECT PRINTING | 67 |
| CHAPTER 6 MATERIAL MARKETS | 69 |
| OVERVIEW | 69 |
| <i>TABLE 11 GLOBAL BLOW MOLDED PLASTIC PACKAGING MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS)</i> | 69 |
| <i>FIGURE 1 GLOBAL BLOW MOLDED PACKAGING MARKET SHARE BY RESIN TYPE, 2014 (%)</i> | 69 |
| POLYETHYLENE TEREPHTHALATE (PET) | 70 |
| OVERVIEW | 70 |
| APPLICATIONS | 70 |
| MARKET SIZE AND FORECAST | 71 |
| <i>TABLE 12 GLOBAL BLOW MOLDED PET PACKAGING MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 71 |
| POLYETHYLENE (PE) | 72 |
| OVERVIEW | 72 |

| TOPIC | PAGE NO. |
|--|-----------------|
| APPLICATIONS | 72 |
| MARKET SIZE AND FORECAST | 73 |
| <i>TABLE 13 GLOBAL BLOW MOLDED PE PACKAGING MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 73 |
| POLYPROPYLENE (PP) | 74 |
| OVERVIEW | 74 |
| APPLICATIONS | 74 |
| MARKET SIZE AND FORECAST | 75 |
| <i>TABLE 14 GLOBAL BLOW MOLDED PP PACKAGING MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 75 |
| POLYVINYL CHLORIDE (PVC) | 76 |
| OVERVIEW | 76 |
| APPLICATIONS | 76 |
| MARKET SIZE AND FORECAST | 76 |
| <i>TABLE 15 GLOBAL BLOW MOLDED PVC PACKAGING MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 77 |
| OTHER BLOW MOLDING PLASTIC PACKAGING MATERIALS | 77 |
| OVERVIEW | 77 |
| <i>TABLE 16 GLOBAL MARKET FOR BLOW MOLDED PLASTIC PACKAGING OF OTHER MATERIALS BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 78 |
| POLYAMIDE (PA) | 78 |
| POLYCARBONATE (PC) | 79 |
| POLYETHYLENE NAPHTHALATE (PEN) | 79 |
| BIOPLASTICS | 80 |
| CHAPTER 7 END-USE MARKETS | 83 |
| OVERVIEW | 83 |
| <i>TABLE 17 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END USE SECTOR, THROUGH 2019 (MILLION POUNDS)</i> | 83 |
| <i>FIGURE 2 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET SHARE BY END USE SECTOR, 2014 (%)</i> | 83 |
| FOOD | 84 |
| OVERVIEW | 84 |
| MARKET FORECAST | 85 |
| <i>TABLE 18 GLOBAL BLOW MOLDED PLASTIC FOOD PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 85 |
| RECENT PRODUCT DEVELOPMENTS | 86 |
| Amcor Develops PET Jar That Require Metal Lug Closures | 86 |
| Marks & Spencer Pickles Packed in Wide-Mouth PET Jars | 86 |
| Graham Packaging Develops Wide-Mouth Jar | 86 |
| Duerr's Replaces Glass With Plastic Jars for Peanut Butter | 87 |
| RPC Corby Develops Artemis Jar for Dried Food | 87 |
| Petainer Launches New PET Jar | 87 |
| Sipa Develops Improved Hot-Fill Ketchup Bottle | 87 |
| DAIRY PRODUCTS | 88 |
| OVERVIEW | 88 |
| MARKET FORECAST | 89 |
| <i>TABLE 19 GLOBAL BLOW MOLDED PLASTIC DAIRY PRODUCT PACKAGING CONSUMPTION BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 89 |

| TOPIC | PAGE NO. |
|---|-----------------|
| RECENT PRODUCT DEVELOPMENTS | 89 |
| Kortec and Sidel Develop Shelf-Stable PET Milk Bottle | 90 |
| Empresas Polar Launches an Ambient Stored Yoghurt | 90 |
| Greiner Packaging Develops Blow Molded Yoghurt Container | 90 |
| DRINKS | 90 |
| OVERVIEW | 90 |
| TABLE 20 GLOBAL BLOW MOLDED PLASTIC DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 91 |
| TABLE 21 GLOBAL BLOW MOLDED PLASTIC DRINKS PACKAGING CONSUMPTION MARKET BY DRINKS SECTOR, THROUGH 2019 (MILLION POUNDS) | 91 |
| SOFT DRINKS | 92 |
| Overview | 92 |
| TABLE 22 GLOBAL BLOW MOLDED PLASTIC SOFT DRINKS PACKAGING CONSUMPTION MARKET BY SOFT DRINKS SECTOR, THROUGH 2019 (MILLION POUNDS) | 92 |
| TABLE 23 GLOBAL BLOW MOLDED PLASTIC SOFT DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 93 |
| Carbonated Soft Drinks | 93 |
| TABLE 24 GLOBAL BLOW MOLDED PLASTIC CARBONATED SOFT DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 94 |
| Bottled Water | 95 |
| TABLE 25 GLOBAL BLOW MOLDED PLASTIC BOTTLED WATER PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 95 |
| Other Soft Drinks | 96 |
| TABLE 26 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET FOR OTHER SOFT DRINKS BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 96 |
| Fruit Juices and Juice Drinks | 97 |
| Functional and Energy Drinks | 97 |
| Ready-to-Drink Tea and Coffee | 98 |
| Recent Product Developments | 98 |
| Crystal Geysler Water Launches Iced Tea in Hot-Fill PET Bottle | 98 |
| Seoul Milk Launches Fruit Juice in Dual-Chambered PET Bottle | 98 |
| Bulke Beverage Introduces Dual-Chamber Tea Drink in a Plastic Bottle | 98 |
| ALCOHOLIC DRINKS | 99 |
| Overview | 99 |
| TABLE 27 GLOBAL BLOW MOLDED PLASTIC ALCOHOLIC DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 99 |
| Beer | 99 |
| Technology Developments | 101 |
| Wines and Spirits | 103 |
| HOT DRINKS | 104 |
| Overview | 104 |
| TABLE 28 GLOBAL BLOW MOLDED PLASTIC HOT DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 105 |

| TOPIC | PAGE NO. |
|---|-----------------|
| NON-FOOD MARKETS | 105 |
| OVERVIEW | 105 |
| <i>TABLE 29 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET FOR NONFOOD BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 106 |
| <i>TABLE 30 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET FOR NONFOOD BY SECTOR, THROUGH 2019 (MILLION POUNDS)</i> | 106 |
| PHARMACEUTICALS AND MEDICAL | 106 |
| Overview | 106 |
| Market Forecast | 107 |
| <i>TABLE 31 GLOBAL BLOW MOLDED PLASTIC PHARMACEUTICALS AND MEDICAL PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 107 |
| COSMETICS AND PERSONAL CARE PRODUCTS | 108 |
| Overview | 108 |
| Market Forecast | 109 |
| <i>TABLE 32 GLOBAL BLOW MOLDED PLASTIC COSMETICS AND PERSONAL CARE PRODUCT PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 109 |
| New Product Developments | 110 |
| Fusion Packaging Introduces Eco-Friendly PP Bottle | 111 |
| Dieter Bakic Bottles Target Premium Personal Care Packaging | 111 |
| Alpha Packaging Develops New Bottle Range | 111 |
| Elnett Hair Care Introduces New Plastic Bottle Concept | 111 |
| APPE Launches Eco-Friendly SprayPET Aerosol | 111 |
| HOUSEHOLD CARE PRODUCTS | 111 |
| Overview | 111 |
| Market Forecast | 112 |
| <i>TABLE 33 GLOBAL BLOW MOLDED PLASTIC HOUSEHOLD CARE PRODUCT PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 112 |
| OTHER CONSUMER PRODUCTS | 113 |
| Overview | 113 |
| Market Forecast | 113 |
| <i>TABLE 34 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET FOR OTHER CONSUMER PRODUCTS BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 114 |
| Recent Product Developments | 114 |
| RPC Develops Plastic Container for Car Care | 114 |
| RPC Develops HDPE Bottle for Garden Products | 114 |
| CHAPTER 8 GEOGRAPHIC MARKETS | 116 |
| OVERVIEW | 116 |
| <i>TABLE 35 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS)</i> | 116 |
| <i>FIGURE 3 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET SHARE BY REGION, 2014 (%)</i> | 116 |
| <i>TABLE 36 GLOBAL BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY REGION, THROUGH 2019 (\$ MILLIONS)</i> | 117 |
| WESTERN EUROPE | 118 |

| TOPIC | PAGE NO. |
|--|-----------------|
| <i>TABLE 37 WESTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS)</i> | 118 |
| <i>TABLE 38 WESTERN EUROPE BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS)</i> | 118 |
| <i>TABLE 39 WESTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END USE SECTOR, THROUGH 2019 (MILLION POUNDS)</i> | 119 |
| <i>TABLE 40 WESTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS)</i> | 120 |
| FRANCE | 121 |
| <i>TABLE 41 FRANCE: ECONOMIC AND DEMOGRAPHIC DATA, 2009-2014</i> | 121 |
| <i>TABLE 42 FRANCE - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 121 |
| Foods | 122 |
| Alcoholic Drinks | 122 |
| Cosmetics and Personal Care Products | 122 |
| Dairy Products | 122 |
| Soft Drinks | 122 |
| Household Care Products | 122 |
| GERMANY | 123 |
| <i>TABLE 43 GERMANY - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 123 |
| <i>TABLE 44 GERMANY - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 123 |
| Foods | 124 |
| Alcoholic Drinks | 124 |
| Cosmetics and Personal Care Products | 124 |
| Dairy Products | 124 |
| Household Care Products | 124 |
| Soft Drinks | 124 |
| ITALY | 125 |
| <i>TABLE 45 ITALY - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 125 |
| <i>TABLE 46 ITALY - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 125 |
| Foods | 126 |
| Alcoholic Drinks | 126 |
| Cosmetics and Personal Care Products | 126 |
| Dairy Products | 126 |
| Household Care Products | 126 |
| Soft Drinks | 127 |
| SPAIN | 127 |
| <i>TABLE 47 SPAIN - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 127 |
| <i>TABLE 48 SPAIN - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 128 |
| Foods | 128 |
| Alcoholic Drinks | 128 |
| Cosmetics and Personal Care Products | 128 |
| Dairy Products | 128 |
| Household Care Products | 129 |
| Soft Drinks | 129 |
| UNITED KINGDOM | 129 |

| TOPIC | PAGE NO. |
|--|-----------------|
| <i>TABLE 49 UK - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 129 |
| <i>TABLE 50 UK - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 130 |
| Foods | 130 |
| Alcoholic Drinks | 130 |
| Cosmetics and Personal Care Products | 131 |
| Dairy Products | 131 |
| Household Care Products | 131 |
| Soft Drinks | 131 |
| EASTERN EUROPE | 132 |
| <i>TABLE 51 EASTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS)</i> | 132 |
| <i>TABLE 52 EASTERN EUROPE BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS)</i> | 133 |
| <i>TABLE 53 EASTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END USE SECTOR, THROUGH 2019 (MILLION POUNDS)</i> | 133 |
| <i>TABLE 54 EASTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS)</i> | 134 |
| POLAND | 134 |
| <i>TABLE 55 POLAND - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 135 |
| <i>TABLE 56 POLAND - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 135 |
| Foods | 135 |
| Alcoholic Drinks | 136 |
| Cosmetics and Personal Care Products | 136 |
| Dairy Products | 136 |
| Household Care Products | 136 |
| Soft Drinks | 136 |
| RUSSIA | 137 |
| <i>TABLE 57 RUSSIA: ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 137 |
| <i>TABLE 58 RUSSIA - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 137 |
| Foods | 138 |
| Alcoholic Drinks | 138 |
| Cosmetics and Personal Care Products | 138 |
| Dairy Products | 139 |
| Household Care Products | 139 |
| Soft Drinks | 139 |
| NORTH AMERICA | 139 |
| <i>TABLE 59 NORTH AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS)</i> | 139 |
| <i>TABLE 60 NORTH AMERICA BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS)</i> | 140 |
| <i>TABLE 61 NORTH AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END-USE SECTOR, THROUGH 2019 (MILLION POUNDS)</i> | 140 |
| <i>TABLE 62 NORTH AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS)</i> | 141 |
| UNITED STATES | 141 |
| <i>TABLE 63 U.S. - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 142 |

| TOPIC | PAGE NO. |
|---|-----------------|
| <i>TABLE 64 U.S. -BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 142 |
| Foods | 142 |
| Alcoholic Drinks | 143 |
| Cosmetics and Personal Care Products | 143 |
| Dairy Products | 143 |
| Household Care Products | 143 |
| Soft Drinks | 144 |
| CANADA | 144 |
| <i>TABLE 65 CANADA -ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 144 |
| <i>TABLE 66 CANADA - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 144 |
| Foods | 145 |
| Alcoholic Drinks | 145 |
| Cosmetics and Personal Care Products | 145 |
| Dairy Products | 145 |
| Household Care Products | 145 |
| Soft Drinks | 146 |
| MEXICO | 146 |
| <i>TABLE 67 MEXICO -ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 146 |
| <i>TABLE 68 MEXICO - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 146 |
| Foods | 147 |
| Alcoholic Drinks | 147 |
| Cosmetics and Personal Care Products | 147 |
| Dairy Products | 147 |
| Household Care Products | 148 |
| Soft Drinks | 148 |
| SOUTH AND CENTRAL AMERICA | 148 |
| <i>TABLE 69 SOUTH AND CENTRAL AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS)</i> | 148 |
| <i>TABLE 70 SOUTH AND CENTRAL AMERICA BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS)</i> | 149 |
| <i>TABLE 71 SOUTH AND CENTRAL AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END-USE SECTOR, THROUGH 2019 (MILLION POUNDS)</i> | 149 |
| <i>TABLE 72 SOUTH AND CENTRAL AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS)</i> | 150 |
| BRAZIL | 150 |
| <i>TABLE 73 BRAZIL - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 150 |
| <i>TABLE 74 BRAZIL - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 151 |
| Foods | 151 |
| Alcoholic Drinks | 151 |
| Cosmetics and Personal Care Products | 152 |
| Dairy Products | 152 |
| Household Care Products | 152 |
| Soft Drinks | 152 |
| ASIA-PACIFIC | 152 |

| TOPIC | PAGE NO. |
|--|-----------------|
| <i>TABLE 75 ASIA-PACIFIC BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS)</i> | 153 |
| <i>TABLE 76 ASIA-PACIFIC BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS)</i> | 153 |
| <i>TABLE 77 ASIA-PACIFIC BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END-USE SECTOR, THROUGH 2019 (MILLION POUNDS)</i> | 153 |
| <i>TABLE 78 ASIA-PACIFIC BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS)</i> | 154 |
| CHINA | 155 |
| <i>TABLE 79 CHINA -ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 155 |
| <i>TABLE 80 CHINA - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 155 |
| Foods | 156 |
| Alcoholic Drinks | 156 |
| Cosmetics and Personal Care Products | 156 |
| Dairy Products | 157 |
| Household Care Products | 157 |
| Soft Drinks | 157 |
| INDIA | 157 |
| <i>TABLE 81 INDIA - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 157 |
| <i>TABLE 82 INDIA - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 158 |
| Foods | 158 |
| Alcoholic Drinks | 158 |
| Cosmetics and Personal Care Products | 159 |
| Dairy Products | 159 |
| Household Care Products | 159 |
| Soft Drinks | 159 |
| JAPAN | 160 |
| <i>TABLE 83 JAPAN - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 160 |
| <i>TABLE 84 JAPAN - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 160 |
| Foods | 161 |
| Alcoholic Drinks | 161 |
| Cosmetics and Personal Care Products | 161 |
| Dairy Products | 161 |
| Household Care Products | 161 |
| Soft Drinks | 161 |
| MIDDLE EAST AND AFRICA | 162 |
| <i>TABLE 85 MIDDLE EAST AND AFRICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS)</i> | 162 |
| <i>TABLE 86 MIDDLE EAST AND AFRICA BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS)</i> | 162 |
| <i>TABLE 87 MIDDLE EAST AND AFRICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END USE SECTOR, THROUGH 2019 (MILLION POUNDS)</i> | 163 |
| <i>TABLE 88 MIDDLE EAST AND AFRICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS)</i> | 164 |
| TURKEY | 164 |
| <i>TABLE 89 TURKEY - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014</i> | 164 |

| TOPIC | PAGE NO. |
|--|-----------------|
| <i>TABLE 90 TURKEY - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS)</i> | 165 |
| Food | 165 |
| Alcoholic Drinks | 165 |
| Cosmetics and Personal Care Products | 166 |
| Dairy Products | 166 |
| Household Care Products | 166 |
| Soft Drinks | 166 |
| CHAPTER 9 COMPANY PROFILES | 168 |
| ALPHA PACKAGING | 168 |
| ALPLA WERKE, ALWIN LEHNER GMBH & CO. KG | 168 |
| AMCOR RIGID PLASTICS | 169 |
| ARTENIUS PET PACKAGING EUROPE (APPE) | 170 |
| CONSOLIDATED CONTAINER CO. LLC | 170 |
| CONSTAR PLASTICS B.V. | 171 |
| ESTERFORM PACKAGING | 171 |
| GRAHAM PACKAGING COMPANY INC. | 172 |
| GREINER PACKAGING INTERNATIONAL | 172 |
| LOGOPLASTE | 173 |
| NAMPAK PLASTICS EUROPE LIMITED | 173 |
| NIAGARA BOTTLING LLC | 174 |
| PETAINER UK HOLDINGS LTD. | 174 |
| PLASTIC BOTTLE CORP. | 175 |
| PLASTIC TECHNOLOGIES INC. | 175 |
| PLASTIPAK PACKAGING INC. | 176 |
| PROMENS | 176 |
| RESILUX NV | 177 |
| RPC GROUP PLC | 178 |
| SAILOR PLASTICS | 179 |
| SERIOPLAST SPA | 179 |
| SILGAN PLASTICS CORP. | 180 |
| SOUTHEASTERN CONTAINER INC. | 180 |
| TOYO SEIKAN KAISHA LTD. | 180 |
| WESTERN CONTAINER CORP. | 181 |
| ZHUHAI ZHONGFU ENTERPRISE CO. LTD. | 181 |
| CHAPTER 10 LEGISLATIVE AND REGULATORY ISSUES | 183 |
| PACKAGING WASTE RECYCLING AND FOOD CONTACT REGULATION | 183 |
| EUROPEAN UNION | 183 |
| UNITED STATES | 184 |
| JAPAN | 185 |
| CHAPTER 11 PATENTS | 187 |
| DEVICE FOR BLOW-MOLDING CONTAINERS | 187 |
| BLOW MOLDING TOOL AND METHOD FOR PRODUCING EXTRUSION BLOW MOLDED PLASTIC ARTICLES | 187 |

| TOPIC | PAGE NO. |
|--|-----------------|
| APPARATUS FOR SHAPING PLASTIC PREFORMS, COMPRISING A STERILE CHAMBER | 188 |
| PROCESSES FOR LIQUID OR HYDRAULIC BLOW MOLDING | 188 |
| | |
| CHAPTER 12 SELECTED KEY ACRONYMS | 190 |

LIST OF TABLES

| TABLE HEADING | PAGE NO. |
|---|-----------------|
| SUMMARY TABLE GLOBAL MARKET FOR BLOW MOLDED PLASTIC PACKAGING BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS) | 7 |
| TABLE 1 SUMMARY OF COMPETING PACK FORMATS FOR BLOW MOLDED BOTTLES AND JARS BY PRODUCT SECTOR | 15 |
| TABLE 2 TOP FIVE GLOBAL PET RESIN PRODUCERS, 2014 | 20 |
| TABLE 3 TOP FIVE GLOBAL HDPE RESIN PRODUCERS, 2014 | 22 |
| TABLE 4 TOP FIVE GLOBAL PP RESIN PRODUCERS, 2014 | 23 |
| TABLE 5 TOP TEN GLOBAL BLOW MOLDED PLASTIC PACKAGING PRODUCERS, 2013 (\$ MILLIONS) | 24 |
| TABLE 6 SUMMARY OF KEY MARKET DRIVERS AND TRENDS OF BLOW MOLDED PLASTIC PACKAGING | 25 |
| TABLE 7 SUMMARY OF TECHNOLOGY DEVELOPMENTS FOR BLOW MOLDED PLASTIC PACKAGING | 39 |
| TABLE 8 SUMMARY OF LEADING PROVIDERS OF MULTILAYER BARRIER TECHNOLOGIES FOR BLOW MOLDED PLASTIC PACKAGING | 41 |
| TABLE 9 SUMMARY OF LEADING PROVIDERS OF MONOLAYER BLEND BARRIER TECHNOLOGIES FOR BLOW MOLDED PLASTIC PACKAGING | 43 |
| TABLE 10 SUMMARY OF LEADING PROVIDERS OF BARRIER COATING TECHNOLOGIES FOR BLOW MOLDED PLASTIC PACKAGING | 47 |
| TABLE 11 GLOBAL BLOW MOLDED PLASTIC PACKAGING MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS) | 69 |
| TABLE 12 GLOBAL BLOW MOLDED PET PACKAGING MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 71 |
| TABLE 13 GLOBAL BLOW MOLDED PE PACKAGING MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 73 |
| TABLE 14 GLOBAL BLOW MOLDED PP PACKAGING MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 75 |
| TABLE 15 GLOBAL BLOW MOLDED PVC PACKAGING MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 77 |
| TABLE 16 GLOBAL MARKET FOR BLOW MOLDED PLASTIC PACKAGING OF OTHER MATERIALS BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 78 |
| TABLE 17 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END USE SECTOR, THROUGH 2019 (MILLION POUNDS) | 83 |
| TABLE 18 GLOBAL BLOW MOLDED PLASTIC FOOD PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 85 |
| TABLE 19 GLOBAL BLOW MOLDED PLASTIC DAIRY PRODUCT PACKAGING CONSUMPTION BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 89 |
| TABLE 20 GLOBAL BLOW MOLDED PLASTIC DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 91 |
| TABLE 21 GLOBAL BLOW MOLDED PLASTIC DRINKS PACKAGING CONSUMPTION MARKET BY DRINKS SECTOR, THROUGH 2019 (MILLION POUNDS) | 91 |
| TABLE 22 GLOBAL BLOW MOLDED PLASTIC SOFT DRINKS PACKAGING CONSUMPTION MARKET BY SOFT DRINKS SECTOR, THROUGH 2019 (MILLION POUNDS) | 92 |
| TABLE 23 GLOBAL BLOW MOLDED PLASTIC SOFT DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 93 |
| TABLE 24 GLOBAL BLOW MOLDED PLASTIC CARBONATED SOFT DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 94 |

| TABLE HEADING | PAGE NO. |
|--|-----------------|
| TABLE 25 GLOBAL BLOW MOLDED PLASTIC BOTTLED WATER PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 95 |
| TABLE 26 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET FOR OTHER SOFT DRINKS BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 96 |
| TABLE 27 GLOBAL BLOW MOLDED PLASTIC ALCOHOLIC DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 99 |
| TABLE 28 GLOBAL BLOW MOLDED PLASTIC HOT DRINKS PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 105 |
| TABLE 29 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET FOR NONFOOD BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 106 |
| TABLE 30 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET FOR NONFOOD BY SECTOR, THROUGH 2019 (MILLION POUNDS) | 106 |
| TABLE 31 GLOBAL BLOW MOLDED PLASTIC PHARMACEUTICALS AND MEDICAL PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 107 |
| TABLE 32 GLOBAL BLOW MOLDED PLASTIC COSMETICS AND PERSONAL CARE PRODUCT PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 109 |
| TABLE 33 GLOBAL BLOW MOLDED PLASTIC HOUSEHOLD CARE PRODUCT PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 112 |
| TABLE 34 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET FOR OTHER CONSUMER PRODUCTS BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 114 |
| TABLE 35 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY GEOGRAPHIC REGION, THROUGH 2019 (MILLION POUNDS) | 116 |
| TABLE 36 GLOBAL BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY REGION, THROUGH 2019 (\$ MILLIONS) | 117 |
| TABLE 37 WESTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS) | 118 |
| TABLE 38 WESTERN EUROPE BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS) | 118 |
| TABLE 39 WESTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END USE SECTOR, THROUGH 2019 (MILLION POUNDS) | 119 |
| TABLE 40 WESTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS) | 120 |
| TABLE 41 FRANCE: ECONOMIC AND DEMOGRAPHIC DATA, 2009-2014 | 121 |
| TABLE 42 FRANCE - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 121 |
| TABLE 43 GERMANY - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 123 |
| TABLE 44 GERMANY - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 123 |
| TABLE 45 ITALY - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 125 |
| TABLE 46 ITALY - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 125 |
| TABLE 47 SPAIN - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 127 |
| TABLE 48 SPAIN - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 128 |
| TABLE 49 UK - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 129 |

| TABLE HEADING | PAGE NO. |
|--|-----------------|
| TABLE 50 UK - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 130 |
| TABLE 51 EASTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS) | 132 |
| TABLE 52 EASTERN EUROPE BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS) | 133 |
| TABLE 53 EASTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END USE SECTOR, THROUGH 2019 (MILLION POUNDS) | 133 |
| TABLE 54 EASTERN EUROPE BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS) | 134 |
| TABLE 55 POLAND - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 135 |
| TABLE 56 POLAND - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 135 |
| TABLE 57 RUSSIA: ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 137 |
| TABLE 58 RUSSIA - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 137 |
| TABLE 59 NORTH AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS) | 139 |
| TABLE 60 NORTH AMERICA BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS) | 140 |
| TABLE 61 NORTH AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END-USE SECTOR, THROUGH 2019 (MILLION POUNDS) | 140 |
| TABLE 62 NORTH AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS) | 141 |
| TABLE 63 U.S. - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 142 |
| TABLE 64 U.S. -BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 142 |
| TABLE 65 CANADA -ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 144 |
| TABLE 66 CANADA - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 144 |
| TABLE 67 MEXICO -ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 146 |
| TABLE 68 MEXICO - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 146 |
| TABLE 69 SOUTH AND CENTRAL AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS) | 148 |
| TABLE 70 SOUTH AND CENTRAL AMERICA BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS) | 149 |
| TABLE 71 SOUTH AND CENTRAL AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END-USE SECTOR, THROUGH 2019 (MILLION POUNDS) | 149 |
| TABLE 72 SOUTH AND CENTRAL AMERICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS) | 150 |
| TABLE 73 BRAZIL - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 150 |
| TABLE 74 BRAZIL - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 151 |
| TABLE 75 ASIA-PACIFIC BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS) | 153 |
| TABLE 76 ASIA-PACIFIC BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS) | 153 |
| TABLE 77 ASIA-PACIFIC BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END-USE SECTOR, THROUGH 2019 (MILLION POUNDS) | 153 |
| TABLE 78 ASIA-PACIFIC BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS) | 154 |

| TABLE HEADING | PAGE NO. |
|---|-----------------|
| TABLE 79 CHINA -ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 155 |
| TABLE 80 CHINA - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 155 |
| TABLE 81 INDIA - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 157 |
| TABLE 82 INDIA - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 158 |
| TABLE 83 JAPAN - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 160 |
| TABLE 84 JAPAN - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 160 |
| TABLE 85 MIDDLE EAST AND AFRICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY COUNTRY, THROUGH 2019 (MILLION POUNDS) | 162 |
| TABLE 86 MIDDLE EAST AND AFRICA BLOW MOLDED PLASTIC PACKAGING MARKET VALUE BY COUNTRY, THROUGH 2019 (\$ MILLIONS) | 162 |
| TABLE 87 MIDDLE EAST AND AFRICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY END USE SECTOR, THROUGH 2019 (MILLION POUNDS) | 163 |
| TABLE 88 MIDDLE EAST AND AFRICA BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET BY RESIN TYPE, THROUGH 2019 (MILLION POUNDS) | 164 |
| TABLE 89 TURKEY - ECONOMIC AND DEMOGRAPHIC DATA, 2009 TO 2014 | 164 |
| TABLE 90 TURKEY - BLOW MOLDED PLASTIC PACKAGING CONSUMPTION AND MARKET VALUE, THROUGH 2019 (MILLION POUNDS/\$ MILLIONS) | 165 |

LIST OF FIGURES

| FIGURE TITLE | PAGE NO. |
|--|-----------------|
| SUMMARY FIGURE GLOBAL MARKET FOR BLOW MOLDED PLASTIC PACKAGING BY RESIN TYPE, 2013-2019 (MILLION POUNDS) | 8 |
| FIGURE 1 GLOBAL BLOW MOLDED PACKAGING MARKET SHARE BY RESIN TYPE, 2014 (%) | 69 |
| FIGURE 2 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET SHARE BY END USE SECTOR, 2014 (%) | 83 |
| FIGURE 3 GLOBAL BLOW MOLDED PLASTIC PACKAGING CONSUMPTION MARKET SHARE BY REGION, 2014 (%) | 116 |