

Long Fiber Thermoplastics Market by Fiber Type (Glass, Carbon), Resin Type (PA, PP, PEEK, PPA), Manufacturing Process (Injection Molding, Pultrusion, Direct-LFT (D-LFT)), End-use Industry and Region - Global Forecast to 2027

Market Report | 2023-03-01 | 258 pages | MarketsandMarkets

AVAILABLE LICENSES:

- Single User \$4950.00
- Multi User \$6650.00
- Corporate License \$8150.00
- Enterprise Site License \$10000.00

Report description:

The global long fiber thermoplastics market size is expected to grow from USD 3.5 Billion in 2021 to USD 6.1 Billion by 2027, at a CAGR of 9.3% during the forecast period. The long fiber thermoplastics offer exceptional properties, such as stiffness, strength, tenacity, density, and thermal & electrical conductivity, fatigue, and corrosion resistance. Owing to these outstanding properties offered by the long fiber thermoplastics, conventional materials such as aluminum steel are preferred less in high performance applications.

"Glass long fiber thermoplastics are the fastest-growing fiber type of long fiber thermoplastics market in terms of value." The glass fiber thermoplastics segment accounted for the largest share of the long fiber thermoplastics market, accounting for 55.7% and 89.4% in terms of value and volume, respectively, in 2021. Carbon fiber thermoplastic is extensively used in sporting goods and aerospace applications, as they require high stiffness and high-performance products. This segment is expected to register the highest CAGR, owing to the increasing use of these fibers in high-performance long fiber thermoplastics used in transportation and electrical & electronics applications.

"PA resin based long fiber thermoplastics is the fastest-growing resin type of long fiber thermoplastics, in terms of value." PA resin based long fiber thermoplastics are the fastest-growing resin type. PA resins are partially crystalline thermoplastics that offer an ideal combination of properties for applications such as automotive, furniture, medical, and electronics. The resin is used in long fiber thermoplastics. It is easy to process and has a high heat and chemical attack resistance, mechanical strength, and stiffness with good dielectric properties, friction, and wear resistance. Major drivers of this market are the growing demand for long fiber thermoplastics with high thermal stability in the under-hood applications of the automotive industry..

"Piultrusion manufacturing process is the fastest-growing manufacturing process of long fiber thermoplastics, in terms of value." Pultrusion is a low cost, high-speed, automated, and versatile cross-sectional shape process. It is a process used to make various

complex shapes. In this process, reinforcement materials, such as fibers, are impregnated with resin. This is followed by a separate performing system pulled through a heated stationary die, where the resin undergoes polymerization. The die completes the impregnation of fiber, controls the resin content, and cures the material into its final shape as it passes through the die. Its applications include door & window frames, rails & fences, and bridges, where a firm structure is required.

"Automotive is the fastest-growing end-use industry of long fiber thermoplastics, in terms of value."

The Automotive end-use industry is expected to grow at the highest CAGR during the forecast period. The use of long fiber thermoplastics in automobiles provides high tensile strength, helping manufacturers to achieve high fuel economy. Due to its corrosion resistance properties, long fiber thermoplastics have helped the wind industry to grow by allowing wind turbines to work in the harshest environments

"APAC is the fastest-growing long fiber thermoplastics market."

APAC is projected to register the highest CAGR in terms of value in the global long fiber thermoplastics market during the forecast period. The growth of the long fiber thermoplastics market in Asia Pacific is driven by increasing consumption in various industries, such as automotive, construction, aerospace, and electrical & electronics. The market in these end use industries is led by China, India, Japan, and South Korea. The growing electric vehicles market is among the key factors boosting the demand for long fiber thermoplastics in the automotive end use industry.

This study has been validated through primary interviews conducted with various industry experts globally. These primary sources have been divided into the following three categories:

-[]By Company Type- Tier 1- 37%, Tier 2- 33%, and Tier 3- 30%

- By Designation- C Level- 50%, Director Level- 20%, and Others- 30%

-[By Region- North America- 15%, Europe- 50%, Asia Pacific (APAC) - 20%, Latin America-5%, Middle East & Africa (MEA)-10%, The report provides a comprehensive analysis of company profiles listed below:

- Celanese Corporation (US) - SABIC (Saudi Arabia) - Lanxess AG (Germany) - BASF SE (Germany)

-[Mitsubishi Chemical Group Corporation (Japan)

- Avient Corporation (US)

Daicel Polymer Ltd. (Japan)

- Asahi Kasei Corporation (Japan)

- RTP Company, Inc. (US)

- Solvay SA (Belgium)

Research Coverage

This report covers the global long fiber thermoplastics market and forecasts the market size until 2026. The report includes the market segmentation - Fiber Type (Glass, Carbon, and Other), Resin Type(PA, PP, PEEK, PPA, and others), Manufacturing process (injection molding, pultrusion, Direct-LFT, and others), End-use Industry (Automotive, Electrical & Electronics, Consumer goods, Sporting goods, and Others) and Region (Europe, North America, APAC, South America, and MEA). Porter's Five Forces analysis, along with the drivers, restraints, opportunities, and challenges, are discussed in the report. It also provides company profiles and competitive strategies adopted by the major players in the global long fiber thermoplastics market.

Key benefits of buying the report:

The report will help market leaders/new entrants in this market in the following ways:

1. This report segments the global long fiber thermoplastics market comprehensively and provides the closest approximations of the revenues for the overall market and the sub-segments across different verticals and regions.

2. The report helps stakeholders understand the pulse of the long fiber thermoplastics market and provides them with information on key market drivers, restraints, challenges, and opportunities.

3. This report will help stakeholders to understand competitors better and gain more insights to better their position in their businesses. The competitive landscape section includes the competitor ecosystem, new product development, agreement, and acquisitions.

Reasons to buy the report:

The report will help market leaders/new entrants in this market by providing them with the closest approximations of the revenues for the overall long fiber thermoplastics market and the sub-segments. This report will help stakeholders to understand the competitive landscape and gain more insights and position their businesses and market strategies in a better way. The report will also help stakeholders understand the pulse of the market and provide them with information on key market drivers, restraints, challenges, and opportunities.

Table of Contents:

1⊓INTRODUCTION⊓44 1.1 STUDY OBJECTIVES 44 1.2 MARKET DEFINITION 44 1.2.1 INCLUSIONS AND EXCLUSIONS 44 1.3 MARKET SCOPE 45 FIGURE 1 LONG FIBER THERMOPLASTICS MARKET SEGMENTATION 45 1.3.1 REGIONS COVERED 45 1.3.2 ||YEARS CONSIDERED ||46 1.4 CURRENCY CONSIDERED 46 1.5 UNIT CONSIDERED 46 1.6 LIMITATIONS 46 1.7 STAKEHOLDERS 47 1.8 SUMMARY OF CHANGES 47 2 RESEARCH METHODOLOGY 48 2.1 RESEARCH APPROACH 48 FIGURE 2□LONG FIBER THERMOPLASTICS MARKET: RESEARCH DESIGN□48 FIGURE 3 LONG FIBER THERMOPLASTICS MARKET: RESEARCH APPROACH 49 2.2 BASE NUMBER CALCULATION 50 2.2.1 APPROACH 1: SUPPLY-SIDE ANALYSIS 50 2.2.2 APPROACH 2: DEMAND-SIDE APPROACH 50 2.3 IMPACT OF RECESSION 51 2.4 FORECAST NUMBER CALCULATION 51 2.4.1 SUPPLY-SIDE FACTORS 51 2.4.2 DEMAND-SIDE FACTORS 51 2.5 RESEARCH DATA 51 2.5.1 SECONDARY DATA 52 2.5.1.1 Key data from secondary sources 52 2.5.2 PRIMARY DATA 2.5.2.1 Key data from primary sources 53 2.5.2.2 Primary interviews - Top long fiber thermoplastics manufacturers 53 2.5.2.3 Breakdown of primary interviews 54 2.5.2.4 Key industry insights 54

2.6 MARKET SIZE ESTIMATION 55 2.6.1 BOTTOM-UP APPROACH 55 FIGURE 4 LONG FIBER THERMOPLASTICS MARKET: BOTTOM-UP APPROACH 55 2.6.2 TOP-DOWN APPROACH 55 FIGURE 5 LONG FIBER THERMOPLASTICS MARKET: TOP-DOWN APPROACH 55 2.7 DATA TRIANGULATION 56 FIGURE 6 LONG FIBER THERMOPLASTICS MARKET: DATA TRIANGULATION 56 2.8 FACTOR ANALYSIS 57 2.9 ASSUMPTIONS 57 2.10 MARKET GROWTH RATE ASSUMPTIONS 58 2.11 LIMITATIONS 58 2.12 RISKS ASSOCIATED WITH LONG FIBER THERMOPLASTICS MARKET 58 3 EXECUTIVE SUMMARY 59 FIGURE 7∏GLASS FIBER LONG FIBER THERMOPLASTICS DOMINATED MARKET IN 2021∏60 FIGURE 8 PP ACCOUNTED FOR LARGEST MARKET SHARE IN 2021 60 FIGURE 9⊓INIECTION MOLDING PROCESS EXHIBITED LARGEST MARKET SHARE IN 2021⊓61 FIGURE 10 AUTOMOTIVE INDUSTRY TO WITNESS HIGHEST MARKET GROWTH BETWEEN 2022 AND 2027 61 FIGURE 11 EUROPE EXPERIENCED HIGHEST GROWTH IN LONG FIBER THERMOPLASTICS MARKET IN 2021 62 4 PREMIUM INSIGHTS 63 4.1 LONG FIBER THERMOPLASTICS MARKET, BY VOLUME 63 FIGURE 12 SIGNIFICANT GROWTH EXPECTED IN LONG FIBER THERMOPLASTICS MARKET BETWEEN 2022 AND 2027 63 4.2 LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2021 63 FIGURE 13 GLASS LONG FIBER THERMOPLASTICS SEGMENT REGISTERED HIGHEST MARKET SHARE IN 2021 63 4.3 LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2021 64 FIGURE 14 PP-BASED LONG FIBER THERMOPLASTICS SEGMENT ACCOUNTED FOR LARGEST MARKET SHARE IN 2021 64 4.4 LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2021 64 FIGURE 15∏INJECTION MOLDING CONTRIBUTED HIGHEST SHARE TO MANUFACTURING PROCESS SEGMENT IN 2021∏64 4.5□LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2021□65 FIGURE 16 AUTOMOTIVE INDUSTRY DOMINATED MARKET IN TERMS OF VALUE IN 2021 65 4.6□LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2021□65 FIGURE 17 EUROPE SHOWED HIGHEST MARKET SHARE (VOLUME) IN 2021 65 4.7 LONG FIBER THERMOPLASTICS MARKET GROWTH, BY KEY COUNTRIES 66 FIGURE 18 CHINA TO BE FASTEST-GROWING LONG FIBER THERMOPLASTICS MARKET DURING FORECAST PERIOD 66 5⊓MARKET OVERVIEW∏67 5.1 INTRODUCTION 67 5.2 MARKET DYNAMICS 68 FIGURE 19 LONG FIBER THERMOPLASTICS MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES 68 5.2.1 DRIVERS 68 5.2.1.1 Increased demand for fuel-efficient vehicles 68 5.2.1.2 Exceptional properties over short fiber thermoplastics 69 5.2.1.3 Less generation of VOCs and recyclability 69 5.2.2 RESTRAINTS 69 5.2.2.1 Weaker mechanical properties and higher cost than thermosets 69 5.2.2.2 || High processing and manufacturing costs || 69 5.2.3 OPPORTUNITIES 70 5.2.3.1 Use of long fiber thermoplastics in various end use industries 70 5.2.4 CHALLENGES 70

5.2.4.1 Need to reduce capital and technology costs 70 5.2.4.2 High R&D cost 70 5.3 PORTER'S FIVE FORCES ANALYSIS 70 FIGURE 20 LONG FIBER THERMOPLASTICS MARKET: PORTER'S FIVE FORCES ANALYSIS 71 5.3.1 BARGAINING POWER OF BUYERS 71 5.3.2 BARGAINING POWER OF SUPPLIERS 72 5.3.3 THREAT OF NEW ENTRANTS 72 5.3.4 THREAT OF SUBSTITUTES 72 5.3.5 INTENSITY OF COMPETITIVE RIVALRY 73 TABLE 1 CONG FIBER THERMOPLASTICS MARKET: PORTER'S FIVE FORCES ANALYSIS 5.4 SUPPLY CHAIN ANALYSIS 73 TABLE 2 LONG FIBER THERMOPLASTICS MARKET: COMPANIES AND THEIR ROLE IN ECOSYSTEM 73 5.5 KEY STAKEHOLDERS AND BUYING CRITERIA 5.5.1 KEY STAKEHOLDERS IN BUYING PROCESS FIGURE 21 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP 3 END USE INDUSTRIES 74 TABLE 3 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP 3 END USE INDUSTRIES 74 5.5.2 BUYING CRITERIA 75 FIGURE 22 KEY BUYING CRITERIA FOR TOP 3 END USE INDUSTRIES 75 TABLE 4 KEY BUYING CRITERIA FOR TOP 3 END USE INDUSTRIES 75 5.6 TECHNOLOGY ANALYSIS 75 TABLE 5 COMPARATIVE STUDY OF PREPREG MANUFACTURING PROCESSES 76 5.7 ECOSYSTEM: LONG FIBER THERMOPLASTICS MARKET 76 5.8 VALUE CHAIN ANALYSIS 77 FIGURE 23 VALUE CHAIN ANALYSIS: LONG FIBER THERMOPLASTICS MARKET 77 5.9 KEY MARKETS FOR IMPORT/EXPORT 77 5.9.1 CHINA 77 5.9.2 US 78 5.9.3 GERMANY 78 5.9.4[FRANCE]78 5.9.5 || INDIA || 78 5.10 PRICING ANALYSIS 78 5.11 AVERAGE SELLING PRICES OF KEY PLAYERS, BY FIBER TYPE 79 FIGURE 24⊓AVERAGE SELLING PRICES OF KEY PLAYERS FOR FIBER TYPES (USD/KG)∏79 TABLE 6∏AVERAGE SELLING PRICES OF KEY PLAYERS, BY FIBER TYPE (USD/KG)∏79 5.12 AVERAGE SELLING PRICES, BY MANUFACTURING PROCESS 79 FIGURE 25 AVERAGE SELLING PRICES FOR DIFFERENT MANUFACTURING PROCESSES (USD/KG) 79 5.13 AVERAGE SELLING PRICES, BY RESIN TYPE 80 FIGURE 26 AVERAGE SELLING PRICES BASED ON RESIN TYPE (USD/KG) 80 5.14 AVERAGE SELLING PRICES, BY END USE INDUSTRY 80 FIGURE 27 AVERAGE SELLING PRICES BASED ON END USE INDUSTRY (USD/KG) 80 5.15 AVERAGE SELLING PRICES 80 TABLE 7 LONG FIBER THERMOPLASTICS AVERAGE SELLING PRICE, BY REGION 80 5.16 LONG FIBER THERMOPLASTICS MARKET: OPTIMISTIC, PESSIMISTIC, AND REALISTIC SCENARIOS TABLE 8 LONG FIBER THERMOPLASTICS MARKET: CAGR (BY VALUE) IN OPTIMISTIC, PESSIMISTIC, AND REALISTIC SCENARIOS 81 5.16.1 OPTIMISTIC SCENARIO 81 5.16.2 PESSIMISTIC SCENARIO 81 5.16.3 REALISTIC SCENARIO 81

5.17 KEY CONFERENCES AND EVENTS 82

TABLE 9[]DETAILED LIST OF CONFERENCES AND EVENTS RELATED TO LONG FIBER THERMOPLASTICS AND RELATED MARKETS, 2022-2024 82

5.18 TARIFFS AND REGULATIONS 83

5.18.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 84

TABLE 10 NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 84 TABLE 11 UROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 185 TABLE 12 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 85 TABLE 13 REST OF THE WORLD: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 86 5.19⊓LONG FIBER THERMOPLASTICS PATENT ANALYSIS⊓86 5.19.1 INTRODUCTION 86 5.19.2 METHODOLOGY 86 5.19.3 DOCUMENT TYPE 86 TABLE 14 LONG FIBER THERMOPLASTICS: GLOBAL PATENTS 87 FIGURE 28 GLOBAL PATENT ANALYSIS, BY DOCUMENT TYPE 87 FIGURE 29 GLOBAL PATENT PUBLICATION TREND ANALYSIS: LAST 10 YEARS 87 5.19.4 INSIGHTS 88 5.19.5 LEGAL STATUS OF PATENTS 88 FIGURE 30 LONG FIBER THERMOPLASTICS MARKET: LEGAL STATUS OF PATENTS 88 5.19.6 URISDICTION ANALYSIS 88 FIGURE 31 GLOBAL JURISDICTION ANALYSIS 88 5.19.7 TOP APPLICANTS ANALYSIS 89 FIGURE 32 ARKEMA ACCOUNTED FOR HIGHEST NUMBER OF PATENTS 89 5.19.8 LIST OF PATENTS BY ARKEMA FRANCE 89 5.19.9 LIST OF PATENTS BY DAICEL POLYMER LTD. 90 5.19.10 LIST OF PATENTS BY LX HAUSYS LTD. 91 5.19.11 TOP 10 PATENT OWNERS (US) IN LAST 10 YEARS 91 5.20 CASE STUDY ANALYSIS 92 5.21 TRENDS AND DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES 93 6 LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE 94 6.1⊓INTRODUCTION⊓95 FIGURE 33∏PP RESIN TO DOMINATE LONG FIBER THERMOPLASTICS MARKET FROM 2022 TO 2027∏95

TABLE 15⊓LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2019-2021 (USD MILLION)∏95

TABLE 16⊓LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2019-2021 (KILOTON)∏96

TABLE 17 LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2022-2027 (USD MILLION) 96

TABLE 18□LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2022-2027 (KILOTON)□96 6.2 POLYPROPYLENE (PP) 97

6.2.1 USED IN CONSUMER AND INDUSTRIAL APPLICATIONS 97

FIGURE 34 EUROPE TO BE LARGEST POLYPROPYLENE LONG FIBER THERMOPLASTICS MARKET DURING FORECAST PERIOD 97 6.2.2 □ PP: LONG FIBER THERMOPLASTICS MARKET, BY REGION □ 97

TABLE 19∏PP: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION)∏97

TABLE 20[]PP: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON)[]98

TABLE 21 TPP: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION) 98

TABLE 22∏PP: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON)∏98

6.3 POLYAMIDE (PA) 99

6.3.1 REDUCES AUTOMOTIVE WEIGHT 99

FIGURE 35⊓ASIA PACIFIC TO BE DOMINANT POLYAMIDE LONG FIBER THERMOPLASTICS MARKET (2022-2027)□99

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

6.3.2 PA: LONG FIBER THERMOPLASTICS MARKET, BY REGION 99 TABLE 23[]PA: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION)[]99 TABLE 24∏PA: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON)∏100 TABLE 25[]PA: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION)]]100 TABLE 26∏PA: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON)∏100 6.4 POLYETHER ETHER KETONE (PEEK) 101 6.4.1 □ PRODUCES COMPLEX SHAPES QUICKLY, CATERING TO HUGE DEMAND FROM AUTOMOTIVE INDUSTRY □ 101 FIGURE 36[]EUROPE TO WITNESS LARGEST MARKET SHARE IN PEEK SEGMENT DURING FORECAST PERIOD[]101 6.4.2 PEEK: LONG FIBER THERMOPLASTICS MARKET, BY REGION 101 TABLE 27 □ PEEK: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION) □ 101 TABLE 28 PEEK: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON) 102 TABLE 29 PEEK: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION) 102 TABLE 30 PEEK: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON) 102 6.5 POLYPHTHALAMIDE (PPA) 103 6.5.1 WIDELY USED TO REPLACE METALS IN SOME APPLICATIONS 103 FIGURE 37⊓ASIA PACIFIC TO HAVE LARGEST MARKET SHARE IN POLYAMIDE LONG FIBER THERMOPLASTICS MARKET (2022-2027)∏103 6.5.2 PPA: LONG FIBER THERMOPLASTICS MARKET, BY REGION 103 TABLE 31 PPA: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION) 103 TABLE 32 PPA: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON) 104 TABLE 33[PPA: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION)[104 TABLE 34 PPA: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON) 104 6.6⊓OTHER RESINS⊓105 6.6.1 ⊓POLYBUTYLENE TEREPHTHALATE (PBT) □105 6.6.2 POLYPHENYLENE SULFIDE (PPS) 105 6.6.3 OTHER RESINS: LONG FIBER THERMOPLASTICS MARKET, BY REGION 105 TABLE 35∏OTHER RESINS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION)∏105 TABLE 36[]OTHER RESINS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON)[]106 TABLE 37∏OTHER RESINS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION)∏106 TABLE 38[OTHER RESINS: LONG FIBER THERMOPLASTICS MARKET SIZE, BY REGION, 2022-2027 (KILOTON)]106 7 LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE 107 7.1 INTRODUCTION 108 FIGURE 38 GLASS FIBER SEGMENT TO DOMINATE LONG FIBER THERMOPLASTICS MARKET DURING FORECAST PERIOD 108 TABLE 39 LONG FIBER THERMOPLASTICS MARKET. BY FIBER TYPE, 2019-2021 (USD MILLION) 108 TABLE 40⊓LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2019-2021 (KILOTON)∏109 TABLE 41 LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2022-2027 (USD MILLION) 109 TABLE 42∏LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2022-2027 (KILOTON)∏109 7.2\[]GLASS\[]109 7.2.1 EXCELLENT CHEMICAL PROPERTIES 109 FIGURE 39 DEMAND FOR GLASS LONG FIBER THERMOPLASTICS TO BE HIGHEST IN ASIA PACIFIC FROM 2022 TO 2027 110 7.2.2 GLASS: LONG FIBER THERMOPLASTICS MARKET, BY REGION 110 TABLE 43∏GLASS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION)∏110 TABLE 44 GLASS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON) 111 TABLE 45∏GLASS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION)∏111 TABLE 46∏GLASS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON)∏111 7.3 CARBON 112 7.3.1 INCREASING DEMAND FROM AUTOMOTIVE AND SPORTING GOODS INDUSTRIES 112 FIGURE 40 ASIA PACIFIC EXPECTED TO HOLD LARGEST MARKET SHARE OF CARBON LONG FIBER THERMOPLASTICS MARKET

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

DURING FORECAST PERIOD[]112

7.3.2 CARBON: LONG FIBER THERMOPLASTICS MARKET, BY REGION 113 TABLE 47 CARBON: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION) 113 TABLE 48 CARBON: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON) 113 TABLE 49 CARBON: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION) 113 TABLE 50 CARBON: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON) 114 7.4 OTHER FIBERS 114

7.4.1 FINDS INCREASING DEMAND FROM CONSUMER AND SPORTING GOODS 114

FIGURE 41 NORTH AMERICA TO ACCOUNT FOR HIGHER MARKET SHARE IN FIBER TYPE MARKET (2022-2027) 114 7.4.2 OTHER FIBERS: LONG FIBER THERMOPLASTICS MARKET, BY REGION 115

TABLE 51[]OTHER FIBERS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION)[]115 TABLE 52[]OTHER FIBERS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON)[]115 TABLE 53[]OTHER FIBERS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION)[]115 TABLE 54[]OTHER FIBERS: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON)[]116 8][LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS[]117 8.1][INTRODUCTION][]18

FIGURE 42[INJECTION MOLDING TO DOMINATE LONG FIBER THERMOPLASTICS MARKET (2022-2027)[]118 TABLE 55[LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2019-2021 (USD MILLION)[]118 TABLE 56[LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2019-2021 (KILOTON)[]119 TABLE 57[]LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2022-2027 (USD MILLION)[]119 TABLE 58[]LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2022-2027 (USD MILLION)[]119 8.2[]INJECTION MOLDING[]120

8.2.1 MOST COMMONLY REINFORCED THERMOPLASTIC COMPOSITE 120

FIGURE 43[]HIGHEST DEMAND FOR GLASS FIBER TYPE TO BE EXPECTED IN ASIA PACIFIC FROM 2022 TO 2027[]120 8.2.2[]INJECTION MOLDING: LONG FIBER THERMOPLASTICS MARKET, BY REGION[]120

TABLE 59 INJECTION MOLDING: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION) 120 TABLE 60 INJECTION MOLDING: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON) 121 TABLE 61 INJECTION MOLDING: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION) 121 TABLE 62 INJECTION MOLDING: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON) 121 8.3 PULTRUSION 122

8.3.1 HIGHLY AUTOMATED PROCESS WITH MAJOR DEMAND FROM AUTOMOTIVE INDUSTRY 122 FIGURE 44 ASIA PACIFIC TO HAVE DOMINANT MARKET SHARE FOR CARBON LONG FIBER THERMOPLASTICS DURING FORECAST PERIOD 122

8.3.2 PULTRUSION: LONG FIBER THERMOPLASTICS MARKET, BY REGION 123

TABLE 63 PULTRUSION: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION)[123 TABLE 64 PULTRUSION: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON)[123 TABLE 65 PULTRUSION: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION)[123 TABLE 66 PULTRUSION: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON)[124 8.4 DIRECT-LFT (D-LFT)][124

8.4.1 IMPROVES PROPERTIES OF LONG FIBER THERMOPLASTICS 124

FIGURE 45[]NORTH AMERICA TO BE LARGEST OTHER FIBER TYPE LONG FIBER THERMOPLASTICS MARKET[]124 8.4.2[]D-LFT: LONG FIBER THERMOPLASTICS MARKET, BY REGION[]125

TABLE 67[D-LFT: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION)[]125 TABLE 68[]D-LFT: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON)[]125 TABLE 69[]D-LFT: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION)[]125 TABLE 70[]D-LFT: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON)[]126 8.5[]OTHER PROCESSES[]126

8.5.1 COMPRESSION MOLDING 126

8.5.2 EXTRUSION 126

8.5.3 OTHER PROCESSES: LONG FIBER THERMOPLASTICS MARKET, BY REGION 127 TABLE 71 OTHER PROCESSES: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION) 127 TABLE 72 OTHER PROCESSES: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON) 127 TABLE 73 OTHER PROCESSES: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION) 127 TABLE 74 OTHER PROCESSES: LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON) 128 9 LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY 129

9.1 INTRODUCTION 130

FIGURE 46[]AUTOMOTIVE INDUSTRY TO REGISTER HIGHEST MARKET SHARE IN LONG FIBER THERMOPLASTICS MARKET[]130 TABLE 75[]LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION)[]130 TABLE 76[]LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON)[]131 TABLE 77[]LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION)[]131 TABLE 78[]LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON)[]131 9.2[]AUTOMOTIVE[]132

9.2.1 USED IN HOODS, SUNROOF FRAMES, SEATS, DOORS, AND LUGGAGE COMPARTMENTS 132

9.2.2 INTERIOR COMPONENTS 132

9.2.3 EXTERIOR COMPONENTS 132

FIGURE 47[]EUROPE TO HOLD MAJOR MARKET SHARE OF AUTOMOTIVE INDUSTRY DURING FORECAST PERIOD[]132 9.2.4[]LONG FIBER THERMOPLASTICS MARKET IN AUTOMOTIVE, BY REGION[]133

TABLE 79 LONG FIBER THERMOPLASTICS MARKET IN AUTOMOTIVE, BY REGION, 2019-2021 (USD MILLION) 133 TABLE 80 LONG FIBER THERMOPLASTICS MARKET IN AUTOMOTIVE, BY REGION, 2019-2021 (KILOTON) 133 TABLE 81 LONG FIBER THERMOPLASTICS MARKET IN AUTOMOTIVE, BY REGION, 2022-2027 (USD MILLION) 133 TABLE 82 LONG FIBER THERMOPLASTICS MARKET IN AUTOMOTIVE, BY REGION, 2022-2027 (KILOTON) 134 9.3 ELECTRICAL & ELECTRONICS 134

9.3.1 IMPROVES WEIGHT, THERMAL RESISTANCE, AND ROBUSTNESS 134

FIGURE 48 ASIA PACIFIC TO HAVE HIGHEST SHARE OF ELECTRICAL & ELECTRONICS SEGMENT (2022-2027) 135 9.3.2 LONG FIBER THERMOPLASTICS MARKET IN ELECTRICAL & ELECTRONICS, BY REGION 135

TABLE 83 LONG FIBER THERMOPLASTICS MARKET IN ELECTRICAL & ELECTRONICS, BY REGION, 2019-2021 (USD MILLION) 135 TABLE 84 LONG FIBER THERMOPLASTICS MARKET IN ELECTRICAL & ELECTRONICS, BY REGION, 2019-2021 (KILOTON) 135 TABLE 85 LONG FIBER THERMOPLASTICS MARKET IN ELECTRICAL & ELECTRONICS, BY REGION, 2022-2027 (USD MILLION) 136 TABLE 86 LONG FIBER THERMOPLASTICS MARKET IN ELECTRICAL & ELECTRONICS, BY REGION, 2022-2027 (KILOTON) 136 9.4 CONSUMER GOODS 136

9.4.1 THERMOPLASTICS TO PROVIDE COST-EFFECTIVE SOLUTIONS FOR CONSUMER GOODS 136 FIGURE 49 NORTH AMERICA TO HAVE LARGEST MARKET SHARE IN CONSUMER GOODS SEGMENT DURING FORECAST PERIOD 137 9.4.2 LONG FIBER THERMOPLASTICS MARKET IN CONSUMER GOODS, BY REGION 137

TABLE 87 LONG FIBER THERMOPLASTICS MARKET IN CONSUMER GOODS, 2019-2021 (USD MILLION) 137 TABLE 88 LONG FIBER THERMOPLASTICS MARKET IN CONSUMER GOODS, BY REGION, 2019-2021 (KILOTON) 137 TABLE 89 LONG FIBER THERMOPLASTICS MARKET IN CONSUMER GOODS, BY REGION, 2022-2027 (USD MILLION) 138 TABLE 90 LONG FIBER THERMOPLASTICS MARKET IN CONSUMER GOODS, BY REGION, 2022-2027 (KILOTON) 138 9.5 SPORTING GOODS 138

9.5.1 STRONG, TOUGH, AND LIGHTWEIGHT PROPERTIES INCREASE DEMAND FOR LONG FIBER THERMOPLASTICS 138 FIGURE 50 NORTH AMERICA TO REGISTER HIGHEST MARKET SHARE OF SPORTING GOODS SEGMENT FROM 2022 TO 2027 139 9.5.2 LONG FIBER THERMOPLASTICS MARKET IN SPORTING GOODS, BY REGION 139

TABLE 91 LONG FIBER THERMOPLASTICS MARKET IN SPORTING GOODS, BY REGION, 2019-2021 (USD MILLION) 139 TABLE 92 LONG FIBER THERMOPLASTICS MARKET IN SPORTING GOODS, BY REGION, 2019-2021 (KILOTON) 140 TABLE 93 LONG FIBER THERMOPLASTICS MARKET IN SPORTING GOODS, BY REGION, 2022-2027 (USD MILLION) 140

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com www.scotts-international.com

TABLE 94∏LONG FIBER THERMOPLASTICS MARKET IN SPORTING GOODS, BY REGION, 2022-2027 (KILOTON)∏140 9.6 OTHER INDUSTRIES 141 9.6.1 MARINE 141 9.6.2 AEROSPACE 141 9.6.3 LONG FIBER THERMOPLASTICS MARKET IN OTHER INDUSTRIES, BY REGION 141 TABLE 95⊓LONG FIBER THERMOPLASTICS MARKET IN OTHER INDUSTRIES, BY REGION, 2019-2021 (USD MILLION)⊓141 TABLE 96∏LONG FIBER THERMOPLASTICS MARKET IN OTHER INDUSTRIES, BY REGION, 2019-2021 (KILOTON)∏142 TABLE 97∏LONG FIBER THERMOPLASTICS MARKET IN OTHER INDUSTRIES, BY REGION, 2022-2027 (USD MILLION)∏142 TABLE 98 LONG FIBER THERMOPLASTICS MARKET IN OTHER INDUSTRIES, BY REGION, 2022-2027 (KILOTON) 142 10 LONG FIBER THERMOPLASTICS MARKET, BY REGION 143 10.1⊓INTRODUCTION⊓144 FIGURE 51 GERMANY TO BE FASTEST-GROWING LONG FIBER THERMOPLASTICS MARKET DURING FORECAST PERIOD 144 TABLE 99□LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (USD MILLION)□144 TABLE 100 LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2019-2021 (KILOTON) 145 TABLE 101 LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (USD MILLION) 145 TABLE 102⊓LONG FIBER THERMOPLASTICS MARKET, BY REGION, 2022-2027 (KILOTON)⊓145 10.2 NORTH AMERICA 146 FIGURE 52 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET SNAPSHOT 146 10.2.1 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE 147 TABLE 103 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2019-2021 (USD MILLION) 147 TABLE 104[]NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2019-2021 (KILOTON)]147 TABLE 105[]NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2022-2027 (USD MILLION)[]147 TABLE 106 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2022-2027 (KILOTON) 148 10.2.2 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS 148 TABLE 107 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2019-2021 (USD MILLION)[]148 TABLE 108∏NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2019-2021 (KILOTON)∏148 TABLE 109[]NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2022-2027 (USD MILLION) 149 TABLE 110 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2022-2027 (KILOTON) 149 10.2.3 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE 149 TABLE 111 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2019-2021 (USD MILLION) 149 TABLE 112⊓NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET. BY RESIN TYPE. 2019-2021 (KILOTON)⊓150 TABLE 113 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2022-2027 (USD MILLION) 150 TABLE 114 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2022-2027 (KILOTON) 150 10.2.4 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY TABLE 115 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY END-USE INDUSTRY, 2019-2021 (USD MILLION) 151 TABLE 116 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON) 151 TABLE 117 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION) 151 TABLE 118 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON) 152 10.2.5 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY 152 TABLE 119[]NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY, 2019-2021 (USD MILLION)[]152 TABLE 120 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY, 2019-2021 (KILOTON) 152 TABLE 121 NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY, 2022-2027 (USD MILLION) 153 TABLE 122[NORTH AMERICA: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY, 2022-2027 (KILOTON)[153] 10.2.5.1 US

10.2.5.1.1]Demands long fiber thermoplastics due to stringent industry regulations]153

10.2.5.1.2 US, By end use industry 154

TABLE 123[JUS: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION)]]154 TABLE 124[JUS: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON)]]154 TABLE 125[JUS: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION)]]155 TABLE 126[JUS: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON)]]155 10.2.5.2]Canada]]155

10.2.5.2.1 Second-largest market in region 155

10.2.5.2.2 Canada, By end use industry 156

TABLE 127 CANADA: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION) 156 TABLE 128 CANADA: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON) 156 TABLE 129 CANADA: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION) 156 TABLE 130 CANADA: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON) 157 10.2.5.3 Mexico 157

10.2.5.3.1 Demand from automotive industry to boost market 157

10.2.5.3.2 Mexico, By end use industry 158

TABLE 131 MEXICO: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION) 158 TABLE 132 MEXICO: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON) 158 TABLE 133 MEXICO: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION) 158 TABLE 134 MEXICO: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON) 159 10.3 EUROPE 159

FIGURE 53[]EUROPE: LONG FIBER THERMOPLASTICS MARKET SNAPSHOT[]160

10.3.1 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE 160

TABLE 135[EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2019-2021 (USD MILLION)]160

TABLE 136 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2019-2021 (KILOTON) 160

TABLE 137 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2022-2027 (USD MILLION) 161

TABLE 138 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY FIBER TYPE, 2022-2027 (KILOTON) 161

10.3.2 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS 161

TABLE 139 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2019-2021 (USD MILLION) 161 TABLE 140 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2019-2021 (KILOTON) 162 TABLE 141 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2022-2027 (USD MILLION) 162 TABLE 142 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY MANUFACTURING PROCESS, 2022-2027 (KILOTON) 162 10.3.3 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE 163

TABLE 143 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2019-2021 (USD MILLION) 163 TABLE 144 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2019-2021 (KILOTON) 163 TABLE 145 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2022-2027 (USD MILLION) 163 TABLE 146 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2022-2027 (KILOTON) 164

10.3.4 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY RESIN TYPE, 2022-2027 (KILOTON

TABLE 147 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION) 164 TABLE 148 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON) 164 TABLE 149 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY END-USE INDUSTRY, 2022-2027 (USD MILLION) 165 TABLE 150 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON) 165 10.3.5 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY 166

TABLE 151 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY, 2019-2021 (USD MILLION) 166 TABLE 152 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY, 2019-2021 (KILOTON) 166 TABLE 153 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY, 2022-2027 (USD MILLION) 166 TABLE 154 EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY COUNTRY, 2022-2027 (KILOTON) 167 10.3.5.1 Germany 167

10.3.5.1.1 Expected to have largest market share in Europe 167

10.3.5.1.2 Germany, By end use industry 167

TABLE 155[]GERMANY: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION)[]167 TABLE 156[]GERMANY: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON)[]168 TABLE 157[]GERMANY: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION)[]168 TABLE 158[]GERMANY: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON)[]168 10.3.5.2[]France[]169

10.3.5.2.1 Automotive industry to bolster demand 169

10.3.5.2.2 France: By end use industry 169

TABLE 159[FRANCE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION)[]169 TABLE 160[FRANCE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON)[]169 TABLE 161[FRANCE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION)[]170 TABLE 162[FRANCE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON)[]170 10.3.5.3[]UK[]170

10.3.5.3.1 High demand witnessed for fuel-efficient and lightweight vehicles 170

10.3.5.3.2 UK: By end use industry 171

TABLE 163[]UK: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION)[]171 TABLE 164[]UK: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON)[]171 TABLE 165[]UK: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION)[]171 TABLE 166[]UK: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON)[]172 10.3.5.4[]Italy]172

10.3.5.4.1 Demand by prominent OEMs 172

10.3.5.4.2 Italy: By end use industry 172

TABLE 167[ITALY: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION)[]172 TABLE 168[ITALY: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON)[]173 TABLE 169[ITALY: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION)[]173 TABLE 170[ITALY: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON)[]173 10.3.5.5][Rest of Europe]]174

10.3.5.5.1 Rest of Europe: By end use industry 174

TABLE 171[REST OF EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (USD MILLION)[]174 TABLE 172[REST OF EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2019-2021 (KILOTON)[]174 TABLE 173[REST OF EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (USD MILLION)[]174 TABLE 174[REST OF EUROPE: LONG FIBER THERMOPLASTICS MARKET, BY END USE INDUSTRY, 2022-2027 (KILOTON)[]175



Long Fiber Thermoplastics Market by Fiber Type (Glass, Carbon), Resin Type (PA, PP, PEEK, PPA), Manufacturing Process (Injection Molding, Pultrusion, Direct-LFT (D-LFT)), End-use Industry and Region - Global Forecast to 2027

Market Report | 2023-03-01 | 258 pages | MarketsandMarkets

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

| Select license | License | | Price |
|----------------|-------------------------|-----|------------|
| | Single User | | \$4950.00 |
| | Multi User | | \$6650.00 |
| | Corporate License | | \$8150.00 |
| | Enterprise Site License | | \$10000.00 |
| <u> </u> | · | VAT | |

Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346. [** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

| Email* | Phone* | |
|---------------|-----------------------|---------|
| First Name* | Last Name* | |
| Job title* | | |
| Company Name* | EU Vat / Tax ID / NIP | number* |
| Address* | City* | |
| Zip Code* | Country* | |

Date

2025-05-20

Signature