

Graphene Market by Type (Bulk, Monolayer), Application (Composites, Paints, Energy Storage, Electronics, Catalyst and Tire), End-use Industry (Automotive, Aerospace, Electronics, Military and Construction) and Region - Global Forecast to 2025

https://marketpublishers.com/r/G86CB7D0F26EN.html

Date: March 2021

Pages: 194

Price: US\$ 4,950.00 (Single User License)

ID: G86CB7D0F26EN

Abstracts

The global graphene market size is projected to grow from USD 620 million in 2020 to USD 1,479 million by 2025, at a CAGR of 19.0% between 2020 and 2025. Graphene are demanded in various end-use industries including automotive & transportation, aerospace, electronics, and construction; due to its advantages properties such as high strength, thermal conductivity, and durability. However, global pandemic disease COVID-19 has disrupted the operations of aerospace, automotive & transportation, and other industries which is expected to decrease the demand for graphene in 2020.

"Monolayer graphene is the fastest-growing type of graphene, in terms of value."

The monolayer graphene finds wide applications in various end-use industries. The major applications of monolayer graphene are in quantum computing, pressure sensors, touch sensors, transistors, nanoelcmechanical systems (NEMS), optoelectronics, aerospace components, electronic components and among others. The increasing demand from these applications is expected to drive the monolayer graphene market during the forecasted period.

"Energy Storage & Harvesting is the fastest-growing application of graphene, in terms of value."

Graphene is used in energy generation and storage of capacitors, batteries, and also in grid applications for strong wind or solar power. It is used in lithium-ion batteries to



increase their lifespan and make them flexible, renewable, and lightweight. Graphene-based supercapacitors can charge and discharge easily and find potential usage in camera flashes, cards, wind turbines, and power backup supplies for industries, home, and solar power plants.

"Electronics is the fastest-growing end-use industry of graphene, in terms of value."

Graphene, also called the wonder material, is widely used in the electronics industry as a potential substitute for silicon-based electronic products. High mechanical strength, superior thermal conductivity, and high electron mobility are some of the properties of graphene that are driving the demand for graphene in the electronics end-use industry. Graphene is used in various electronic products such as batteries, optical electronics, transistors, displays and touch screens, capacitors, and transparent memory technology, among others. Wearable technology is another segment where graphene is used in optical electronics to create flexible and wearable newspaper-like smartphones that can be worn on the wrist, tablet, and a rolled-up newspaper. The increasing demand from these applications is expected to drive the market during the forecasted period.

"APAC is the fastest-growing graphene market."

APAC is projected to register the highest CAGR in terms of value in the global graphene market during the forecast period. The increasing R&D activities in the region coupled with increasing demand from automotive & transportation and electronics end-use industry in the region is driving the market growth. APAC is a combination of both emerging markets and developed economies; the growth potential in the region is unlike anything seen before.

Due to COVID-19, numerous industries and automotive companies have halted their production sites across various countries that has led to reduced demand for graphene, which affected the graphene demand in APAC countries. The recovery in the end-use industries with restoration in the supply chain would drive the graphene demand during the forecast period.

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

By Company Type- Tier 1- 40%, Tier 2- 33%, and Tier 3- 27%



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

By Region- North America- 20%, Europe- 50%, APAC- 15%, Latin America-5%, MEA-10%,

The report provides a comprehensive analysis of company profiles listed below:

NanoXplore Inc. (Canada),

Graphenea SA (Spain)

Avanzare Innovacion Tecnologica S.L. (Spain)

Global Graphene Group (US)

Directa Plus S.p.A. (Italy)

Changzhou Sixth Element Materials Technology Co., Ltd. (China)

Ningbo Morsh Technology Co., Ltd. (China)

Research Coverage

This report covers the global graphene market and forecasts the market size until 2025. The report includes the market segmentation —Type (Bulk Graphene and Monolayer Graphene), Application (Composites; Paints, Coatings & ink; Energy Storage & Harvesting; Catalyst; Electronics; Tires and Others), "End-use Industry (Automotive & Transportation, Electronics, Aerospace, Construction, Military & Defense and others) and Region (Europe, North America, APAC, Latin 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 graphene market.

Key benefits of buying the report:

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

Graphene Market by Type (Bulk, Monolayer), Application (Composites, Paints, Energy Storage, Electronics, Catal...



- 1. This report segments the global graphene 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 graphene 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 graphene market and the subsegments. 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.



Contents

1 INTRODUCTION

- 1.1 OBJECTIVES OF THE STUDY
- 1.2 MARKET DEFINITION
 - 1.2.1 INCLUSIONS & EXCLUSIONS
- 1.3 MARKET SCOPE
 - 1.3.1 GRAPHENE MARKET SEGMENTATION
- 1.3.2 YEARS CONSIDERED FOR THE STUDY
- 1.4 CURRENCY
- 1.5 UNIT CONSIDERED
- 1.6 STAKEHOLDERS
- 1.7 SUMMARY OF CHANGES

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
- FIGURE 1 GRAPHENE MARKET: RESEARCH DESIGN
 - 2.1.1 SECONDARY DATA
 - 2.1.1.1 Key data from secondary sources
 - 2.1.2 PRIMARY DATA
 - 2.1.2.1 Key data from primary sources
 - 2.1.2.2 Breakdown of primaries
- 2.2 MARKET SIZE ESTIMATION
- 2.3 MARKET SIZE ESTIMATION SUPPLY SIDE
- 2.4 DATA TRIANGULATION
- FIGURE 2 GRAPHENE MARKET: DATA TRIANGULATION
- 2.5 ASSUMPTIONS

3 EXECUTIVE SUMMARY

FIGURE 3 BULK GRAPHENE TYPE DOMINATED THE MARKET IN 2019
FIGURE 4 COMPOSITES APPLICATION SEGMENT DOMINATED THE MARKET IN 2019

FIGURE 5 AUTOMOTIVE & TRANSPORTATION IS THE KEY END-USE INDUSTRY IN THE GRAPHENE MARKET

FIGURE 6 CHINA LED THE GLOBAL GRAPHENE MARKET IN 2019 FIGURE 7 APAC ACCOUNTED FOR THE LARGEST MARKET SHARE IN 2019



4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES IN THE GRAPHENE MARKET FIGURE 8 HIGH DEMAND FROM AUTOMOTIVE & TRANSPORTATION END-USE INDUSTRY TO DRIVE THE MARKET

4.2 GRAPHENE MARKET, BY TYPE AND END-USE INDUSTRY, 2019 FIGURE 9 BULK GRAPHENE ACCOUNTED FOR LARGER SHARE OF MARKET 4.3 GRAPHENE MARKET, BY APPLICATION

FIGURE 10 COMPOSITES APPLICATION TO LEAD THE DEMAND 4.4 GRAPHENE MARKET, BY KEY COUNTRIES

FIGURE 11 INDIA TO REGISTER THE HIGHEST CAGR

5 MARKET OVERVIEW

- 5.1 INTRODUCTION
- 5.2 MARKET DYNAMICS

FIGURE 12 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES IN GRAPHENE MARKET

- 5.2.1 DRIVERS
 - 5.2.1.1 Increasing applications in end-use industries
 - 5.2.1.2 Increasing R&D activities
- 5.2.2 RESTRAINTS
 - 5.2.2.1 Difficulty in mass production
 - 5.2.2.2 Lack of band gap
- 5.2.3 OPPORTUNITIES
- 5.2.3.1 Increasing demand for graphene from energy storage applications in China
- 5.2.4 CHALLENGES
 - 5.2.4.1 Lack of standardization in graphene industry
 - 5.2.4.2 High production cost
- 5.3 SUPPLY CHAIN ANALYSIS

TABLE 1 GRAPHENE MARKET: SUPPLY CHAIN

5.4 PORTER'S FIVE FORCES ANALYSIS

FIGURE 13 GRAPHENE MARKET: PORTER'S FIVE FORCES ANALYSIS

- **5.4.1 THREAT OF NEW ENTRANTS**
- 5.4.2 THREAT OF SUBSTITUTES
- 5.4.3 BARGAINING POWER OF SUPPLIERS
- 5.4.4 BARGAINING POWER OF BUYERS



5.4.5 INTENSITY OF COMPETITIVE RIVALRY

TABLE 2 GRAPHENE MARKET: PORTER'S FIVE FORCES ANALYSIS

5.5 IMPACT OF COVID-19

5.6 ECOSYSTEM: GRAPHENE MARKET

5.7 VALUE CHAIN ANALYSIS

FIGURE 14 GRAPHENE MARKET: VALUE CHAIN ANALYSIS

5.7.1 RAW MATERIAL SUPPLIERS

5.7.2 RESEARCH & DEVELOPMENT (R&D)

5.7.3 MANUFACTURERS

5.7.4 END-USERS

5.8 TECHNOLOGY ANALYSIS

5.8.1 CVD PROCESS

5.8.2 GRAPHITE EXFOLIATION PROCESS

5.8.2.1 Thermal exfoliation

5.8.2.2 Liquid phase exfoliation (LPE)

5.9 PRICING ANALYSIS

5.9.1 AVERAGE SELLING PRICE

TABLE 3 GRAPHENE AVERAGE SELLING PRICE, BY REGION

5.10 KEY MARKET FOR IMPORT/EXPORT

5.10.1 CHINA

5.10.2 US

5.10.3 GERMANY

5.10.4 JAPAN

5.11 TRADE REGULATIONS

5.12 PATENT ANALYSIS

5.12.1 INTRODUCTION:

5.12.2 METHODOLOGY:

5.12.3 DOCUMENT TYPE

5.12.4 PUBLICATION TRENDS - LAST 5 YEARS

5.12.5 JURISDICTION ANALYSIS

5.12.6 TOP 10 COMPANIES/APPLICANTS

5.12.7 LIST OF PATENTS BY LEE YOUN TEK

5.12.8 LIST OF PATENTS BY SAMSUNG ELECTRONICS CO. LTD.

5.12.9 LIST OF PATENTS BY INTERNATIONAL BUSINESS MACHINES

CORPORATION (IBM)

5.12.10 LIST OF PATENTS BY NANOTEK INSTRUMENTS INC.

5.12.11 LIST OF PATENTS BY KOREA ADVANCED INST SCI & TECH (KAIST)

5.12.12 TOP 20 PATENT OWNERS (US) IN LAST 10 YEARS

5.12.13 PATENT ANALYSIS FOR CHINA JURISDICTION



5.12.14 PATENTING TREND BY YEAR FOR CHINA JURISDICTION IN LAST 10 YEARS

5.12.15 TOP 10 COMPANIES/APPLICANTS FOR CHINA JURISDICTION 5.13 CASE STUDY

6 GRAPHENE MARKET, BY TYPE

6.1 INTRODUCTION

TABLE 4 GRAPHENE APPLICATION AND PRODUCT TYPE MATRIX
FIGURE 15 BULK GRAPHENE TO DOMINATE GRAPHENE MARKET DURING
FORECAST PERIOD

TABLE 5 GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (USD THOUSAND)
TABLE 6 GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (TON)
6.2 BULK GRAPHENE

FIGURE 16 APAC TO DOMINATE BULK GRAPHENE MARKET DURING FORECAST PERIOD

TABLE 7 BULK GRAPHENE MARKET SIZE, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 8 BULK GRAPHENE MARKET SIZE, BY REGION, 2018–2025 (TON) 6.3 MONOLAYER GRAPHENE

TABLE 9 MONOLAYER GRAPHENE MARKET SIZE, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 10 MONOLAYER GRAPHENE MARKET SIZE, BY REGION, 2018–2025 (TON)

7 GRAPHENE MARKET, BY APPLICATION

7.1 INTRODUCTION

FIGURE 17 COMPOSITES APPLICATION SEGMENT TO DOMINATE GRAPHENE MARKET DURING FORECAST PERIOD

TABLE 11 GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (USD THOUSAND)

TABLE 12 GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (TON) 7.2 COMPOSITES

FIGURE 18 APAC REGION TO DOMINATE GRAPHENE MARKET IN COMPOSITES APPLICATION SEGMENT DURING FORECAST PERIOD

TABLE 13 GRAPHENE MARKET SIZE IN COMPOSITES APPLICATION, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 14 GRAPHENE MARKET SIZE IN COMPOSITES APPLICATION, BY REGION, 2018–2025 (TON)



7.3 ENERGY HARVESTING & STORAGE

TABLE 15 GRAPHENE MARKET SIZE IN ENERGY HARVESTING & STORAGE APPLICATION, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 16 GRAPHENE MARKET SIZE IN ENERGY HARVESTING & STORAGE APPLICATION, BY REGION, 2018–2025 (TON)

7.4 PAINTS, COATINGS & INKS

TABLE 17 GRAPHENE MARKET SIZE IN PAINTS, COATINGS & INKS APPLICATION, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 18 GRAPHENE MARKET SIZE IN PAINTS, COATINGS & INKS APPLICATION, BY REGION, 2018–2025 (TON)

7.5 ELECTRONICS

TABLE 19 GRAPHENE MARKET SIZE IN ELECTRONICS APPLICATION, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 20 GRAPHENE MARKET SIZE IN ELECTRONICS APPLICATION, BY REGION, 2018–2025 (TON)

7.6 CATALYST

TABLE 21 GRAPHENE MARKET SIZE IN CATALYST APPLICATION, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 22 GRAPHENE MARKET SIZE IN CATALYST APPLICATION, BY REGION, 2018–2025 (TON)

7.7 TIRE

TABLE 23 GRAPHENE MARKET SIZE IN TIRE APPLICATION, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 24 GRAPHENE MARKET SIZE IN TIRE APPLICATION, BY REGION, 2018–2025 (TON)

7.8 OTHER

TABLE 25 GRAPHENE MARKET SIZE IN OTHER APPLICATION, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 26 GRAPHENE MARKET SIZE IN OTHER APPLICATION, BY REGION, 2018–2025 (TON)

8 GRAPHENE MARKET, BY END-USE INDUSTRY

8.1 INTRODUCTION

FIGURE 19 AUTOMOTIVE & TRANSPORTATION END-USE INDUSTRY TO LEAD CONSUMPTION OF GRAPHENE IN 2019

TABLE 27 GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 28 GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)



8.2 AUTOMOTIVE & TRANSPORTATION

FIGURE 20 APAC EXPECTED TO DOMINATE GRAPHENE MARKET IN AUTOMOTIVE & TRANSPORTATION END-USE INDUSTRY, 2020 VS. 2025

TABLE 29 GRAPHENE MARKET SIZE IN AUTOMOTIVE & TRANSPORTATION END-USE INDUSTRY, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 30 GRAPHENE MARKET SIZE IN AUTOMOTIVE & TRANSPORTATION END-USE INDUSTRY, BY REGION, 2018–2025 (TON)

8.3 AEROSPACE

TABLE 31 GRAPHENE MARKET SIZE IN AEROSPACE END-USE INDUSTRY, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 32 GRAPHENE MARKET SIZE IN AEROSPACE END-USE INDUSTRY, BY REGION, 2018–2025 (TON)

8.4 ELECTRONICS

TABLE 33 GRAPHENE MARKET SIZE IN ELECTRONICS END-USE INDUSTRY, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 34 GRAPHENE MARKET SIZE IN ELECTRONICS END-USE INDUSTRY, BY REGION, 2018–2025 (TON)

8.5 MILITARY & DEFENSE

TABLE 35 GRAPHENE MARKET SIZE IN MILITARY & DEFENSE END-USE INDUSTRY, BY REGION, 2020–2025 (USD THOUSAND)

TABLE 36 GRAPHENE MARKET SIZE IN MILITARY & DEFENSE END-USE INDUSTRY, BY REGION, 2018–2025 (TON)

8.6 CONSTRUCTION

TABLE 37 GRAPHENE MARKET SIZE IN CONSTRUCTION END-USE INDUSTRY, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 38 GRAPHENE MARKET SIZE IN CONSTRUCTION END-USE INDUSTRY, BY REGION, BY REGION, 2018–2025 (TON)

8.7 OTHER

TABLE 39 GRAPHENE MARKET SIZE IN OTHER END-USE INDUSTRIES, BY REGION, 2018–2025 (USD THOUSAND)

TABLE 40 GRAPHENE MARKET SIZE IN OTHER END-USE INDUSTRIES, BY REGION, BY REGION, 2018–2025 (TON)

9 GRAPHENE MARKET, BY REGION

9.1 INTRODUCTION

FIGURE 21 INDIA WAS THE FASTEST-GROWING GRAPHENE MARKET, 2018-2020 TABLE 41 GRAPHENE MARKET SIZE, BY REGION, 2018–2025 (USD THOUSAND) TABLE 42 GRAPHENE MARKET SIZE, BY REGION, 2018–2025 (TON)



9.2 NORTH AMERICA

FIGURE 22 NORTH AMERICA: GRAPHENE MARKET SNAPSHOT

9.2.1 NORTH AMERICA GRAPHENE MARKET, BY TYPE

TABLE 43 NORTH AMERICA: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (USD THOUSAND)

TABLE 44 NORTH AMERICA: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (TON)

9.2.2 NORTH AMERICA GRAPHENE MARKET, BY APPLICATION

TABLE 45 NORTH AMERICA: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (USD THOUSAND)

TABLE 46 NORTH AMERICA: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (TON)

9.2.3 NORTH AMERICA GRAPHENE MARKET, BY END-USE INDUSTRY TABLE 47 NORTH AMERICA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 48 NORTH AMERICA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.2.4 NORTH AMERICA GRAPHENE MARKET, BY COUNTRY

TABLE 49 NORTH AMERICA: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (USD THOUSAND)

TABLE 50 NORTH AMERICA: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (TON)

9.2.4.1 US

TABLE 51 US: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 52 US: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.2.4.2 Canada

TABLE 53 CANADA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 54 CANADA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.3 APAC

FIGURE 23 APAC: GRAPHENE MARKET SNAPSHOT

9.3.1 APAC GRAPHENE MARKET, BY TYPE

TABLE 55 APAC: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (USD THOUSAND)

TABLE 56 APAC: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (TON) 9.3.2 APAC GRAPHENE MARKET, BY APPLICATION



TABLE 57 APAC: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (USD THOUSAND)

TABLE 58 APAC: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (TON) 9.3.3 APAC GRAPHENE MARKET, BY END-USE INDUSTRY

TABLE 59 APAC: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 60 APAC: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.3.4 APAC GRAPHENE MARKET, BY COUNTRY

TABLE 61 APAC: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (USD THOUSAND)

TABLE 62 APAC: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (TON) 9.3.4.1 China

TABLE 63 CHINA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 64 CHINA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.3.4.2 Japan

TABLE 65 JAPAN: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 66 JAPAN: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.3.4.3 India

TABLE 67 INDIA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 68 INDIA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.3.4.4 South Korea

TABLE 69 SOUTH KOREA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 70 SOUTH KOREA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.3.4.5 Rest of APAC

TABLE 71 REST OF APAC: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 72 REST OF APAC: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.4 EUROPE

FIGURE 24 EUROPE: GRAPHENE MARKET SNAPSHOT



9.4.1 EUROPE GRAPHENE MARKET, BY TYPE

TABLE 73 EUROPE: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (USD THOUSAND)

TABLE 74 EUROPE: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (TON) 9.4.2 EUROPE GRAPHENE MARKET, BY APPLICATION

TABLE 75 EUROPE: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (USD THOUSAND)

TABLE 76 EUROPE: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (TON)

9.4.3 EUROPE GRAPHENE MARKET, BY END-USE INDUSTRY

TABLE 77 EUROPE: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 78 EUROPE: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.4.4 EUROPE GRAPHENE MARKET, BY COUNTRY

TABLE 79 EUROPE: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (USD THOUSAND)

TABLE 80 EUROPE: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (TON) 9.4.4.1 Germany

TABLE 81 GERMANY: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 82 GERMANY: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.4.4.2 France

TABLE 83 FRANCE: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 84 FRANCE: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.4.4.3 UK

TABLE 85 UK: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 86 UK: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.4.4.4 Italy

TABLE 87 ITALY: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 88 ITALY: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.4.4.5 Spain



TABLE 89 SPAIN: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 90 SPAIN: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.4.4.6 Rest of Europe

TABLE 91 REST OF EUROPE: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 92 REST OF EUROPE: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.5 LATIN AMERICA

9.5.1 LATIN AMERICA GRAPHENE MARKET, BY TYPE

TABLE 93 NORTH AMERICA: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (USD THOUSAND)

TABLE 94 LATIN AMERICA: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (TON) 9.5.2 LATIN AMERICA GRAPHENE MARKET, BY APPLICATION

TABLE 95 LATIN AMERICA: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (USD THOUSAND)

TABLE 96 LATIN AMERICA: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (TON)

9.5.3 LATIN AMERICA GRAPHENE MARKET, BY END-USE INDUSTRY TABLE 97 LATIN AMERICA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 98 LATIN AMERICA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.5.4 LATIN AMERICA GRAPHENE MARKET, BY COUNTRY

TABLE 99 LATIN AMERICA: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (USD THOUSAND)

TABLE 100 LATIN AMERICA: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (TON)

9.5.4.1 Brazil

TABLE 101 BRAZIL: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 102 BRAZIL: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.5.4.2 Mexico

TABLE 103 MEXICO: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 104 MEXICO: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)



9.5.4.3 Rest of Latin America

TABLE 105 REST OF LATIN AMERICA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 106 REST OF LATIN AMERICA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.6 MEA

9.6.1 MEA GRAPHENE MARKET, BY TYPE

TABLE 107 MEA: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (USD THOUSAND)

TABLE 108 MEA: GRAPHENE MARKET SIZE, BY TYPE, 2018–2025 (TON)

9.6.2 MEA GRAPHENE MARKET, BY APPLICATION

TABLE 109 MEA: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (USD THOUSAND)

TABLE 110 MEA: GRAPHENE MARKET SIZE, BY APPLICATION, 2018–2025 (TON) 9.6.3 MEA GRAPHENE MARKET, BY END-USE INDUSTRY

TABLE 111 MEA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 112 MEA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.6.4 MEA GRAPHENE MARKET, BY COUNTRY

TABLE 113 MEA: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (USD THOUSAND)

TABLE 114 MEA: GRAPHENE MARKET SIZE, BY COUNTRY, 2018–2025 (TON) 9.6.4.1 South Africa

TABLE 115 SOUTH AFRICA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 116 SOUTH AFRICA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

9.6.4.2 Rest of MEA

TABLE 117 REST OF MEA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD THOUSAND)

TABLE 118 REST OF MEA: GRAPHENE MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

10 COMPETITIVE LANDSCAPE

10.1 INTRODUCTION

FIGURE 25 NEW PRODUCT LAUNCH/DEVELOPMENT, EXPANSION, AND AGREEMENT WERE KEY GROWTH STRATEGIES ADOPTED BETWEEN 2015 AND



2020

10.2 MARKET SHARE ANALYSIS

10.3 REVENUE OF TOP MARKET PLAYERS

TABLE 119 REVENUE ANALYSIS OF TOP MARKET PLAYERS, 2019 (USD MILLION)

10.4 MARKET EVALUATION FRAMEWORK

10.4.1 NEW PRODUCT LAUNCH/NEW PRODUCT DEVELOPMENT

TABLE 120 NEW PRODUCT LAUNCHES/NEW PRODUCT DEVELOPMENTS,

JANUARY

2015- DECEMBER 2020

10.4.2 DEALS

TABLE 121 DEALS, JANUARY 2015-DECEMBER 2020

10.4.3 MERGER & ACQUISITION

TABLE 122 MERGER & ACQUISITION, JANUARY 2015- DECEMBER 2020

10.4.4 OTHERS

TABLE 123 OTHERS, JANUARY 2015- DECEMBER 2020

10.5 START-UP/SMALL AND MEDIUM-SIZED ENTERPRISES (SME) EVALUATION

MATRIX

TABLE 124 COMPANY PRODUCT FOOTPRINT

TABLE 125 COMPANY APPLICATION FOOTPRINT

TABLE 126 COMPANY REGION FOOTPRINT

10.5.1 PROGRESSIVE COMPANIES

10.5.2 RESPONSIVE COMPANIES

10.5.3 DYNAMIC COMPANIES

10.5.4 STARTING BLOCKS

FIGURE 26 SME MAPPING

FIGURE 27 STRENGTH OF PRODUCT PORTFOLIO

FIGURE 28 BUSINESS STRATEGY EXCELLENCE

11 COMPANY PROFILE

11.1 KEY PLAYERS

(Business Overview, Products Offered, Recent Developments, SWOT Analysis, Winning imperatives, Development and growth strategies, Threat from competition, Right to win)*

11.1.1 NANOXPLORE INC.

TABLE 127 NANOXPLORE INC: BUSINESS OVERVIEW FIGURE 29 NANOXPLORE INC.: COMPANY SNAPSHOT



TABLE 128 NANOXPLORE INC: PRODUCTS OFFERED

11.1.2 GRAPHENEA SA

TABLE 129 GRAPHENEA SA: BUSINESS OVERVIEW

TABLE 130 GRAPHENEA SA: PRODUCTS OFFERED

11.1.3 AVANZARE INNOVACION TECNOLOGICA S.L.

TABLE 131 AVANZARE INNOVACION TECNOLOGICA S.L.: BUSINESS OVERVIEW

TABLE 132 AVANZARE INNOVACION TECNOLOGICA S.L.: PRODUCTS OFFERED

11.1.4 GLOBAL GRAPHENE GROUP

TABLE 133 GLOBAL GRAPHENE GROUP: BUSINESS OVERVIEW

TABLE 134 GLOBAL GRAPHENE GROUP: PRODUCTS OFFERED

11.1.5 DIRECTA PLUS S.P.A.

TABLE 135 DIRECTA PLUS S.P.A.: BUSINESS OVERVIEW

FIGURE 30 DIRECTA PLUS S.P.A.: COMPANY SNAPSHOT

TABLE 136 DIRECTA PLUS S.P.A.: PRODUCTS OFFERED

11.1.6 HAYDALE GRAPHENE INDUSTRIES PLC

TABLE 137 HAYDALE GRAPHENE INDUSTRIES PLC: BUSINESS OVERVIEW

FIGURE 31 HAYDALE GRAPHENE INDUSTRIES PLC: COMPANY SNAPSHOT

TABLE 138 HAYDALE GRAPHENE INDUSTRIES PLC: PRODUCTS OFFERED

11.1.7 CHANGZHOU SIXTH ELEMENT MATERIALS TECHNOLOGY CO., LTD.

TABLE 139 CHANGZHOU SIXTH ELEMENT MATERIALS TECHNOLOGY CO., LTD.:

BUSINESS OVERVIEW

TABLE 140 CHANGZHOU SIXTH ELEMENT MATERIALS TECHNOLOGY CO., LTD.: PRODUCTS OFFERED

11.1.8 NINGBO MORSH TECHNOLOGY CO., LTD.

TABLE 141 NINGBO MORSH TECHNOLOGY CO., LTD.: BUSINESS OVERVIEW

TABLE 142 NINGBO MORSH TECHNOLOGY CO., LTD.: PRODUCTS OFFERED

11.1.9 XIAMEN KNANO GRAPHENE TECHNOLOGY CORPORATION LIMITED

TABLE 143 XIAMEN KNANO GRAPHENE TECHNOLOGY CORPORATION LIMITED:

BUSINESS OVERVIEW

TABLE 144 XIAMEN KNANO GRAPHENE TECHNOLOGY CORPORATION LIMITED: PRODUCTS OFFERED

11.1.10 JINAN SHENGQUAN GROUP SHARE HOLDING CO., LTD

TABLE 145 JINAN SHENGQUAN GROUP SHARE HOLDING CO., LTD: BUSINESS OVERVIEW

TABLE 146 JINAN SHENGQUAN GROUP SHARE HOLDING CO., LTD: PRODUCTS OFFERED

11.2 OTHER COMPANIES

11.2.1 SHANDONG LITE NANO TECHNOLOGY CO., LTD.

TABLE 147 SHANDONG LITE NANO TECHNOLOGY CO., LTD.: BUSINESS



OVERVIEW

TABLE 148 SHANDONG LITE NANO TECHNOLOGY CO., LTD.: PRODUCTS OFFERED

11.2.2 NANJING XFNANO MATERIALS CO., LTD.

TABLE 149 NANJING XFNANO MATERIALS CO., LTD.: BUSINESS OVERVIEW TABLE 150 NANJING XFNANO MATERIALS CO., LTD.: PRODUCTS OFFERED 11.2.3 QINGDAO HUAGAO INKENE TECHNOLOGY CO., LTD.

TABLE 151 QINGDAO HUAGAO INKENE TECHNOLOGY CO., LTD.: BUSINESS OVERVIEW

TABLE 152 QINGDAO HUAGAO INKENE TECHNOLOGY CO., LTD.: PRODUCTS OFFERED

11.2.4 2D CARBON (CHANGZHOU) TECH INC., LTD.

TABLE 153 2D CARBON (CHANGZHOU) TECH INC., LTD.: BUSINESS OVERVIEW TABLE 154 2D CARBON (CHANGZHOU) TECH INC., LTD.: PRODUCTS OFFERED 11.2.5 SUZHOU GRAPHENE NANOTECHNOLOGY CO., LTD.

TABLE 155 SUZHOU GRAPHENE NANOTECHNOLOGY CO., LTD.: BUSINESS OVERVIEW

TABLE 156 SUZHOU GRAPHENE NANOTECHNOLOGY CO., LTD.: PRODUCTS OFFERED

11.2.6 SUPERC TECHNOLOGY LTD.

TABLE 157 SUPERC TECHNOLOGY LTD.: BUSINESS OVERVIEW TABLE 158 SUPERC TECHNOLOGY LTD.: PRODUCTS OFFERED 11.2.7 JCNANO TECH CO., LTD.

TABLE 159 JCNANO TECH CO., LTD.: BUSINESS OVERVIEW

TABLE 160 JCNANO TECH CO., LTD.: PRODUCTS OFFERED

11.2.8 ENWANG NEW MATERIAL TECHNOLOGY CO., LTD.

TABLE 161 ENWANG NEW MATERIAL TECHNOLOGY CO., LTD.: BUSINESS OVERVIEW

TABLE 162 ENWANG NEW MATERIAL TECHNOLOGY CO., LTD.: PRODUCTS OFFERED

11.2.9 CHINA CARBON GRAPHITE GROUP, INC

FIGURE 32 CHINA CARBON GRAPHITE GROUP, INC: COMPANY SNAPSHOT TABLE 163 CHINA CARBON GRAPHITE GROUP, INC: BUSINESS OVERVIEW TABLE 164 CHINA CARBON GRAPHITE GROUP, INC: PRODUCTS OFFERED 11.2.10 JIANGSU TIANCHUANG NEW MATERIAL TECHNOLOGY CO., LTD.

TABLE 165 JIANGSU TIANCHUANG NEW MATERIAL TECHNOLOGY CO., LTD.: BUSINESS OVERVIEW

TABLE 166 JIANGSU TIANCHUANG NEW MATERIAL TECHNOLOGY CO., LTD.: PRODUCTS OFFERED



11.2.11 WUXI YUANWEN GRAPHENE TECHNOLOGY CO., LTD.

TABLE 167 WUXI YUANWEN GRAPHENE TECHNOLOGY CO., LTD.: BUSINESS OVERVIEW

TABLE 168 WUXI YUANWEN GRAPHENE TECHNOLOGY CO., LTD.: PRODUCTS OFFERED

- 11.2.12 TIANJIN PLANNANO ENERGY TECHNOLOGIES CO., LTD.
- 11.2.13 DONGXU OPTOELECTRONIC TECHNOLOGY CO., LTD.
- 11.2.14 LUOYANG TONGRUN INFO TECHNOLOGY CO., LTD.
- 11.2.15 BEIJING JINGLONG SPECIAL CARBON TECHNOLOGY CO., LTD.
- 11.2.16 QINGDAO YANHAI CARBON MATERIALS CO., LTD.
- *Details on Business Overview, Products Offered, Recent Developments, SWOT Analysis, Winning imperatives, Development and growth strategies, Threat from competition, Right to win might not be captured in case of unlisted companies.

12 APPENDIX

- 12.1 DISCUSSION GUIDE
- 12.2 KNOWLEDGE STORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL
- 12.3 AVAILABLE CUSTOMIZATIONS
- 12.4 RELATED REPORTS
- 12.5 AUTHOR DETAILS



About

The market for modified starches was estimated to be \$XX million in 2013 and is estimated to reach \$XX million by 2018, growing at a rate of XX% by 2018. Food acquired the largest share of XX% in 2013 and is expected to reach XX% by 2018, growing at a rate of XX% for the period of five years. The non-food segment is expected to show a high growth of XX%. Paper-making forms a major segment in non-food applications of modified starch.

The total addressable market for modified starches is estimated to have stood at a value of \$XX billion in 2013, and is expected to reach \$XX billion by 2018, growing at a CAGR of XX%. The major application markets for modified starches have been taken into consideration for the obtained estimation. Modified starches find wide opportunities in the food and industrial sectors. Therefore, some of the major food and industrial applications have been covered for the analysis. Processed food forms a major addressable market for modified starches with a revenue generation of \$XX billion in 2013.

The six major players in the modified starches market that have been considered for the study include Cargill(U.S.), ADM(U.S.), Ingredion (U.S.), Penford(U.S..), Tate & Lyle (U.K.), and Roquette(France). The rest (large, medium, and small-scale organizations) are categorized as others. Cargill holds the highest share, i.e., XX%. The others segment holds more than half of the global market with a share of XX%.

In terms of volume, corn acquired the largest share—XX%—in 2013 and is expected to slightly lose its holding in the market by 2018, falling to a share of XX%. Cassava is an emerging competition for corn and is expected to grow at a rate of XX% by 2018. The other raw materials include potato, wheat, rice, etc.



I would like to order

Product name: Graphene Market by Type (Bulk, Monolayer), Application (Composites, Paints, Energy

Storage, Electronics, Catalyst and Tire) , End-use Industry (Automotive, Aerospace,

Electronics, Military and Construction) and Region - Global Forecast to 2025

Product link: https://marketpublishers.com/r/G86CB7D0F26EN.html

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

Firet name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G86CB7D0F26EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

i iist iiaiiie.	
Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below



and fax the completed form to +44 20 7900 3970