

# **High-Performance Composites Market- Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-2028 Segmented By Resin Type (High-Performance Thermoset Composites and High-Performance Thermoplastic Composites), By Fiber Type (Carbon fiber Composites, Aramid fiber Composites, S-Glass Composites, and Others), By Manufacturing Process (Lay-Up Process, Resin Transfer Molding Process, Compression Molding Process, and Others), By Application (Aerospace & Defense, Automotive, Medical, Wind Turbines, Construction, and Others) By Region, and Competition**

<https://marketpublishers.com/r/H2507ED7728AEN.html>

Date: December 2022

Pages: 113

Price: US\$ 4,900.00 (Single User License)

ID: H2507ED7728AEN

## **Abstracts**

Global High-Performance Composites Market is projected to grow at an impressive rate through 2028 due to increasing demand of high strength materials. China accounted for 31.2 percent of global manufacturing output in 2021.

Composites are made up of two independent elements, fiber, and resin. The unique substance, which has features that set it apart from fiber and resin, stands out for its high stiffness, strength, and lightweight. These properties have increased demand for the substance across several industries, including aerospace, defense, and transportation. Epoxy resin is frequently used as the matrix in high-performance polymer composites for aeronautical and astronautical applications.

High-performance composites are made from carbon, glass, aramid, quartz, ultrahigh-molecular-weight polyethylene, ceramic, boron, and new fibers like poly (p-phenylene benzothiazole) (PBO) fibers. Due to their high tensile strength, high thermal conductivity, and low weight, these materials are frequently used in various industries, including automotive, wind turbines, medical, construction, aerospace, and defense. The increased demand for glass and carbon fiber high-performance reinforced plastics in Airbus airplanes and the growing use of high-performance composites in wind turbine blades are the primary drivers of the high growth rate of the high-performance composites market.

### Growing Demand for Lightweight and High-Strength Materials

Fiber and resin are two separate components that are combined to form composites. The novel substance is distinguished by high strength, stiffness, and low weight, displaying distinct qualities from fiber and resin. These characteristics have raised the demand for the product across various industries, including aerospace, defense, and automotive. Growth in the high-performance composites market is anticipated due to the rising demand for lightweight materials. Automobiles with lighter curb weights are more efficient, which reduces the need for fossil fuels. Environmental bodies like the EPA have pushed using such materials to preserve the ecological balance.

### Low-Cost Substitute for Metals

High-performance composites are considered superior to conventional auto manufacturing materials like steel and aluminum, which are thought to be weaker. Furthermore, the expansion of the automotive industry and the rising popularity of aviation impact the market for high-performance composites. On the other hand, the market growth for high-performance composites is constrained by the high costs of raw materials, manufacture, and assembly. Fiber composites have been used for a very long time in aerospace and aviation applications. However, it is anticipated that the widespread usage of carbon fiber in next-generation commercial aircraft will reduce fuel consumption by about 20% while also offering advantages that will enhance passenger comfort. With high-performance composite, approximately 40% cost reduction is possible, which helps in the competitive price of the product.

### Growing Technological Advancement for Sustainable Development

Advanced carbon and glass fiber-reinforced polymer (FRP) composites are particularly

intriguing for industrial and clean-energy applications. Carbon fiber-reinforced polymer composites outperform many structural materials in terms of structural strength-to-weight ratio and corrosion resistance.

To increase the performance of industrial machinery and components, corrosion resistance and other properties can be added to composites. For instance, fiber-reinforced polymer composites may create more effective heat exchangers, fans, blowers, and other machinery that can withstand corrosive or high-temperature processes, durable pipelines and tanks, and machinery with better electrical insulation.

### Market Segmentation

The global High-Performance Composites market is segmented by resin type, fiber type, manufacturing process, and application. Based on resin type, the market is divided into High-Performance Thermoset Composites and High-Performance Thermoplastic Composites. Based on fiber type, the market is divided into Carbon fiber Composites, Aramid fiber Composites, S-Glass Composites, and Others. Based on the manufacturing process, the market is segmented into Lay-Up Process, Resin Transfer Molding Process, Compression Molding Process, and Others. Based on application, the market is segmented into Aerospace & Defense, Automotive, Medical, Wind Turbines, Construction, and Others.

### Market players

Solvay SA, BASF SE, Chevron Phillips Chemical Co., LLC, Toray Industries Inc., SABIC, LyondellBasell Industries N.V., Owens Corning Corporation, Honeywell International Inc., Teijin Limited, Asahi Kasei Fibers Corp are some of the key market players.

### Report Scope:

In this report, Global Edible Packaging Market has been segmented into following categories, in addition to the industry trends which have also been detailed below:

Global High-Performance Composites market by resin type:

High-Performance Thermoset Composites

High-Performance Thermoplastic Composites Polyethylene

Global High-Performance Composites market by fiber type:

Carbon fiber Composites

Aramid fiber Composites

S-Glass Composites

Others

Global High-Performance Composites market, by manufacturing process:

Lay-Up Process

Resin Transfer Molding Process

Compression Molding Process

Others

Global High-Performance Composites market, by application:

Aerospace & Defense

Automotive, Medical

Wind Turbines

Construction

Others

Global High-Performance Composites Market, By Region:

North America

United States

Canada

Mexico

Europe

France

Germany

United Kingdom

Italy

Spain

Asia-Pacific

China

India

Japan

South Korea

Australia

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Turkey

Egypt

### Competitive Landscape

Company Profiles: Detailed analysis of the major companies in Global High-Performance Composites Market.

### Available Customizations:

With the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

### Company Information

Detailed analysis and profiling of additional market players (up to five).

## Contents

### **1. PRODUCT OVERVIEW**

- 1.1. Market Definition
- 1.2. Scope of the Market
  - 1.2.1. Markets Covered
  - 1.2.2. Years Considered for Study
  - 1.2.3. Key Market Segmentations

### **2. RESEARCH METHODOLOGY**

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

### **3. EXECUTIVE SUMMARY**

- 3.1. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, and Trends

### **4. VOICE OF CUSTOMER**

### **5. GLOBAL HIGH-PERFORMANCE COMPOSITES MARKET OUTLOOK**

- 5.1. Market Size & Forecast
  - 5.1.1. By Value & Volume
- 5.2. Market Share & Forecast
  - 5.2.1. By Resin Type (High-Performance Thermoset Composites and High-Performance Thermoplastic Composites)
  - 5.2.2. By Fiber Type (Carbon fiber Composites, Aramid fiber Composites, S-Glass Composites, and Others)

5.2.3. By Manufacturing Process (Lay-Up Process, Resin Transfer Molding Process, Compression Molding Process, and Others)

5.2.4. By Application (Aerospace & Defense, Automotive, Medical, Wind Turbines, Construction and Others)

5.2.5. By Region (North America, Europe, Asia Pacific, South America, Middle East & Africa)

5.2.6. By Company (2022)

5.3. Market Map

5.3.1. By Resin Type

5.3.2. By Fiber Type

5.3.3. By Manufacturing Process

5.3.4. By Application

5.3.5. By Region

5.4. Pricing Analysis

## **6. NORTH AMERICA HIGH-PERFORMANCE COMPOSITES MARKET OUTLOOK**

6.1. Market Size & Forecast

6.1.1. By Value & Volume

6.2. Market Share & Forecast

6.2.1. By Resin Type

6.2.2. By Fiber Type

6.2.3. By Manufacturing Process

6.2.4. By Application

6.2.5. By Country

6.3. Pricing Analysis

6.4. North America: Country Analysis

6.4.1. United States High-Performance Composites Market Outlook

6.4.1.1. Market Size & Forecast

6.4.1.1.1. By Value & Volume

6.4.1.2. Market Share & Forecast

6.4.1.2.1. By Resin Type

6.4.1.2.2. By Fiber Type

6.4.1.2.3. By Manufacturing Process

6.4.1.2.4. By Application

6.4.2. Mexico High-Performance Composites Market Outlook

6.4.2.1. Market Size & Forecast

6.4.2.1.1. By Value & Volume

6.4.2.2. Market Share & Forecast



- 6.4.2.2.1. By Resin Type
- 6.4.2.2.2. By Fiber Type
- 6.4.2.2.3. By Manufacturing Process
- 6.4.2.2.4. By Application
- 6.4.3. Canada High-Performance Composites Market Outlook
  - 6.4.3.1. Market Size & Forecast
    - 6.4.3.1.1. By Value & Volume
  - 6.4.3.2. Market Share & Forecast
    - 6.4.3.2.1. By Resin Type
    - 6.4.3.2.2. By Fiber Type
    - 6.4.3.2.3. By Manufacturing Process
    - 6.4.3.2.4. By Application

## **7. EUROPE HIGH-PERFORMANCE COMPOSITES MARKET OUTLOOK**

- 7.1. Market Size & Forecast
  - 7.1.1. By Value & Volume
- 7.2. Market Share & Forecast
  - 7.2.1. By Resin Type
  - 7.2.2. By Fiber Type
  - 7.2.3. By Manufacturing Process
  - 7.2.4. By Application
  - 7.2.5. By Country
- 7.3. Pricing Analysis
- 7.4. Europe: Country Analysis
  - 7.4.1. France High-Performance Composites Market Outlook
    - 7.4.1.1. Market Size & Forecast
      - 7.4.1.1.1. By Value & Volume
    - 7.4.1.2. Market Share & Forecast
      - 7.4.1.2.1. By Resin Type
      - 7.4.1.2.2. By Fiber Type
      - 7.4.1.2.3. By Manufacturing Process
      - 7.4.1.2.4. By Application
  - 7.4.2. Germany High-Performance Composites Market Outlook
    - 7.4.2.1. Market Size & Forecast
      - 7.4.2.1.1. By Value & Volume
    - 7.4.2.2. Market Share & Forecast
      - 7.4.2.2.1. By Resin Type
      - 7.4.2.2.2. By Fiber Type

- 7.4.2.2.3. By Manufacturing Process
- 7.4.2.2.4. By Application
- 7.4.3. United Kingdom High-Performance Composites Market Outlook
  - 7.4.3.1. Market Size & Forecast
    - 7.4.3.1.1. By Value & Volume
  - 7.4.3.2. Market Share & Forecast
    - 7.4.3.2.1. By Resin Type
    - 7.4.3.2.2. By Fiber Type
    - 7.4.3.2.3. By Manufacturing Process
    - 7.4.3.2.4. By Application
- 7.4.4. Italy High-Performance Composites Market Outlook
  - 7.4.4.1. Market Size & Forecast
    - 7.4.4.1.1. By Value & Volume
  - 7.4.4.2. Market Share & Forecast
    - 7.4.4.2.1. By Resin Type
    - 7.4.4.2.2. By Fiber Type
    - 7.4.4.2.3. By Manufacturing Process
    - 7.4.4.2.4. By Application
- 7.4.5. Spain High-Performance Composites Market Outlook
  - 7.4.5.1. Market Size & Forecast
    - 7.4.5.1.1. By Value & Volume
  - 7.4.5.2. Market Share & Forecast
    - 7.4.5.2.1. By Resin Type
    - 7.4.5.2.2. By Fiber Type
    - 7.4.5.2.3. By Manufacturing Process
    - 7.4.5.2.4. By Application

## **8. ASIA-PACIFIC HIGH-PERFORMANCE COMPOSITES MARKET OUTLOOK**

- 8.1. Market Size & Forecast
  - 8.1.1. By Value & Volume
- 8.2. Market Share & Forecast
  - 8.2.1. By Resin Type
  - 8.2.2. By Fiber Type
  - 8.2.3. By Manufacturing Process
  - 8.2.4. By Application
  - 8.2.5. By Country
- 8.3. Pricing Analysis
- 8.4. Asia-Pacific: Country Analysis

- 8.4.1. China High-Performance Composites Market Outlook
  - 8.4.1.1. Market Size & Forecast
    - 8.4.1.1.1. By Value & Volume
  - 8.4.1.2. Market Share & Forecast
    - 8.4.1.2.1. By Resin Type
    - 8.4.1.2.2. By Fiber Type
    - 8.4.1.2.3. By Manufacturing Process
    - 8.4.1.2.4. By Application
- 8.4.2. India High-Performance Composites Market Outlook
  - 8.4.2.1. Market Size & Forecast
    - 8.4.2.1.1. By Value & Volume
  - 8.4.2.2. Market Share & Forecast
    - 8.4.2.2.1. By Resin Type
    - 8.4.2.2.2. By Fiber Type
    - 8.4.2.2.3. By Manufacturing Process
    - 8.4.2.2.4. By Application
- 8.4.3. Japan High-Performance Composites Market Outlook
  - 8.4.3.1. Market Size & Forecast
    - 8.4.3.1.1. By Value & Volume
  - 8.4.3.2. Market Share & Forecast
    - 8.4.3.2.1. By Resin Type
    - 8.4.3.2.2. By Fiber Type
    - 8.4.3.2.3. By Manufacturing Process
    - 8.4.3.2.4. By Application
- 8.4.4. South Korea High-Performance Composites Market Outlook
  - 8.4.4.1. Market Size & Forecast
    - 8.4.4.1.1. By Value & Volume
  - 8.4.4.2. Market Share & Forecast
    - 8.4.4.2.1. By Resin Type
    - 8.4.4.2.2. By Fiber Type
    - 8.4.4.2.3. By Manufacturing Process
    - 8.4.4.2.4. By Application
- 8.4.5. Australia High-Performance Composites Market Outlook
  - 8.4.5.1. Market Size & Forecast
    - 8.4.5.1.1. By Value & Volume
  - 8.4.5.2. Market Share & Forecast
    - 8.4.5.2.1. By Resin Type
    - 8.4.5.2.2. By Fiber Type
    - 8.4.5.2.3. By Manufacturing Process

8.4.5.2.4. By Application

## **9. SOUTH AMERICA HIGH-PERFORMANCE COMPOSITES MARKET OUTLOOK**

9.1. Market Size & Forecast

9.1.1. By Value & Volume

9.2. Market Share & Forecast

9.2.1. By Resin Type

9.2.2. By Fiber Type

9.2.3. By Manufacturing Process

9.2.4. By Application

9.2.5. By Country

9.3. Pricing Analysis

9.4. South America: Country Analysis

9.4.1. Brazil High-Performance Composites Market Outlook

9.4.1.1. Market Size & Forecast

9.4.1.1.1. By Value & Volume

9.4.1.2. Market Share & Forecast

9.4.1.2.1. By Resin Type

9.4.1.2.2. By Fiber Type

9.4.1.2.3. By Manufacturing Process

9.4.1.2.4. By Application

9.4.2. Argentina High-Performance Composites Market Outlook

9.4.2.1. Market Size & Forecast

9.4.2.1.1. By Value & Volume

9.4.2.2. Market Share & Forecast

9.4.2.2.1. By Resin Type

9.4.2.2.2. By Fiber Type

9.4.2.2.3. By Manufacturing Process

9.4.2.2.4. By Application

9.4.3. Colombia High-Performance Composites Market Outlook

9.4.3.1. Market Size & Forecast

9.4.3.1.1. By Value & Volume

9.4.3.2. Market Share & Forecast

9.4.3.2.1. By Resin Type

9.4.3.2.2. By Fiber Type

9.4.3.2.3. By Manufacturing Process

9.4.3.2.4. By Application

## **10. MIDDLE EAST AND AFRICA HIGH-PERFORMANCE COMPOSITES MARKET OUTLOOK**

### 10.1. Market Size & Forecast

#### 10.1.1. By Value & Volume

### 10.2. Market Share & Forecast

#### 10.2.1. By Resin Type

#### 10.2.2. By Fiber Type

#### 10.2.3. By Manufacturing Process

#### 10.2.4. By Application

#### 10.2.5. By Country

### 10.3. Pricing Analysis

### 10.4. MEA: Country Analysis

#### 10.4.1. South Africa High-Performance Composites Market Outlook

##### 10.4.1.1. Market Size & Forecast

###### 10.4.1.1.1. By Value & Volume

##### 10.4.1.2. Market Share & Forecast

###### 10.4.1.2.1. By Resin Type

###### 10.4.1.2.2. By Fiber Type

###### 10.4.1.2.3. By Manufacturing Process

###### 10.4.1.2.4. By Application

#### 10.4.2. Saudi Arabia High-Performance Composites Market Outlook

##### 10.4.2.1. Market Size & Forecast

###### 10.4.2.1.1. By Value & Volume

##### 10.4.2.2. Market Share & Forecast

###### 10.4.2.2.1. By Resin Type

###### 10.4.2.2.2. By Fiber Type

###### 10.4.2.2.3. By Manufacturing Process

###### 10.4.2.2.4. By Application

#### 10.4.3. UAE High-Performance Composites Market Outlook

##### 10.4.3.1. Market Size & Forecast

###### 10.4.3.1.1. By Value & Volume

##### 10.4.3.2. Market Share & Forecast

###### 10.4.3.2.1. By Resin Type

###### 10.4.3.2.2. By Fiber Type

###### 10.4.3.2.3. By Manufacturing Process

###### 10.4.3.2.4. By Application

#### 10.4.4. Turkey High-Performance Composites Market Outlook

##### 10.4.4.1. Market Size & Forecast

- 10.4.4.1.1. By Value & Volume
- 10.4.4.2. Market Share & Forecast
  - 10.4.4.2.1. By Resin Type
  - 10.4.4.2.2. By Fiber Type
  - 10.4.4.2.3. By Manufacturing Process
  - 10.4.4.2.4. By Application
- 10.4.5. Egypt High-Performance Composites Market Outlook
  - 10.4.5.1. Market Size & Forecast
    - 10.4.5.1.1. By Value & Volume
  - 10.4.5.2. Market Share & Forecast
    - 10.4.5.2.1. By Resin Type
    - 10.4.5.2.2. By Fiber Type
    - 10.4.5.2.3. By Manufacturing Process
    - 10.4.5.2.4. By Application

## **11. MARKET DYNAMICS**

- 11.1. Drivers
- 11.2. Challenges

## **12. MARKET TRENDS & DEVELOPMENTS**

- 12.1. Merger & Acquisition
- 12.2. Product Launches
- 12.3. Recent Developments

## **13. PORTERS FIVE FORCES ANALYSIS**

- 13.1. Competition in the Industry
- 13.2. Potential of New Entrants
- 13.3. Power of Suppliers
- 13.4. Power of Customers
- 13.5. Threat of Substitute Products

## **14. COMPETITIVE LANDSCAPE**

- 14.1. Business Overview
- 14.2. Company Snapshot
- 14.3. Products & Services

14.4. Financials (In case of listed companies)

14.5. Recent Developments

14.6. SWOT Analysis

14.6.1. Solvay SA

14.6.2. BASF SE

14.6.3. Chevron Phillips Chemical Co., LLC

14.6.4. Toray Industries Inc.

14.6.5. SABIC

14.6.6. LyondellBasell Industries N.V.

14.6.7. Owens Corning Corporation

14.6.8. Honeywell International Inc.

14.6.9. Teijin Limited

14.6.10. Asahi Kasei Fibers Corp

## **15. STRATEGIC RECOMMENDATIONS**

## I would like to order

Product name: High-Performance Composites Market- Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-2028 Segmented By Resin Type (High-Performance Thermoset Composites and High-Performance Thermoplastic Composites), By Fiber Type (Carbon fiber Composites, Aramid fiber Composites, S-Glass Composites, and Others), By Manufacturing Process (Lay-Up Process, Resin Transfer Molding Process, Compression Molding Process, and Others), By Application (Aerospace & Defense, Automotive, Medical, Wind Turbines, Construction, and Others) By Region, and Competition

Product link: <https://marketpublishers.com/r/H2507ED7728AEN.html>

Price: US\$ 4,900.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/H2507ED7728AEN.html>

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

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer 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