

# **SiC Fibers Market by Type (First, Second, and Third Generation), Form (Continuous, Woven, Others), Phase (Amorphous, Crystalline, Usage (Composites, Non-Composites), End-Use Industry, and Region - Global Forecast to 2025**

<https://marketpublishers.com/r/SE7C9D74E52EN.html>

Date: April 2021

Pages: 168

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

ID: SE7C9D74E52EN

## **Abstracts**

The global SiC fibers market size is projected to grow from USD 382 million in 2020 to USD 1,262 million by 2025, at a compound annual growth rate (CAGR) of 27.0% between 2020 and 2025. SiC fibers are advanced and have high-performance characteristics. These fibers are used as reinforcements for Ceramic Matrix Composites (CMCs), Polymer Matrix Composites (PMCs), and Metal Matrix Composites (MMCs). However, the negative impact of the COVID-19 pandemic across all the end-use industries has affected the SiC fibers market adversely.

“Third generation SiC fibers are the fastest-growing segment in the SiC fibers market in terms of both value and volume.”

The third-generation SiC fibers are the most lucrative type that are witnessing increased demand from hot sections of aircraft engines. These fibers are expected to register the highest CAGR during the forecast period in terms of value and volume. NGS Advanced fibers Co., Ltd., COI Ceramics, Inc., Ube Industries, Ltd., and Specialty Materials, Inc., are some of the major players providing third-generation SiC fibers. The mass production of these fibers is expected to reduce the cost during the forecast period.

“Continuous form is anticipated to grow at highest CAGR in terms of value and volume.”

The continuous form of SiC fibers are projected to register the highest CAGR. SiC

continuous fibers, also known as tow, are used as reinforcement materials for PMC, CMC, and MMC. These fibers have excellent heat and creep failure in extreme conditions. Major SiC fiber manufacturers offer SiC fibers in continuous tow forms.

“Crystalline SiC fibers are expected to grow at a faster rate in terms of both value and volume.”

The crystalline phase segment of SiC fibers is expected to register higher growth as compared to the amorphous phase segment during the forecast period. Crystalline SiC fibers have negligible oxygen and carbon content, due to which they can survive in high oxidation environments. Hi-Nicalon S, KD-S, Tyranno SA, Sylramic, Sylramic-iBN, KD-SA are some of the major trademarks of SiC fibers that are in the crystalline phase.

Composites usage dominated the SiC fibers market in terms of both value and volume.”

SiC fibers are mainly used as reinforcements in PMCs, CMCs, and MMCs. However, CMC applications of SiC fibers dominate the market. The non-composite applications of SiC fibers are very limited owing to the high cost of fibers. They are used in chemical and heat transfer industries in high-temperature applications.

“Aerospace & defense is the largest end-use industry of SiC fibers in terms of both value and volume.”

SiC fibers find high demand from aircraft engine manufacturers to make engine components such as shrouds and combustor liners. This is because the SiC fiber-based CMCs have high-performance properties such as high strength; excellent creep, oxidation, and corrosion resistance; and low density. SiC fibers also have excellent oxidation and creep resistance up to 2,732°F. They are also used in vanes, exhaust nozzles, Thermal Protection Systems (TPS), thruster nozzles, reusable rocket nozzles, and turbo pump components for space vehicles.

“North America is the leading SiC fibers market in terms of both value and volume.”

North America accounted for the major share in the SiC fibers market, followed by Europe and APAC. The robust aerospace & defense industry, government support for aerospace & defense industry, presence of major SiC fiber manufactures and pilot production by GE Aviation are triggering the growth in the region.

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- 40%, Tier 2- 33%, and Tier 3- 27%

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:

NGS Advanced Fibers Co., Ltd

Ube Industries, Ltd.

COI Ceramics, Inc.

GE Aviation

Specialty Materials, Inc.

Matech

BJS Ceramics GmbH

Suzhou Saifie Group Co. Ltd. (China)

Ningbo Zhongxing New Materials Co. Ltd

Haydale Technologies

## Research Coverage

This report covers the global SiC fibers market and forecasts the market size until 2025. It includes the following market segmentation –type (first, second, and third generation), form (continuous, woven, others), phase (amorphous, crystalline), usage (composites,

*SiC Fibers Market by Type (First, Second, and Third Generation), Form (Continuous, Woven, Others), Phase (Amor...*

non-composites), end-use industry (aerospace & defense, energy & power, industrial, others) and Region (Europe, North America, APAC, Latin America, and MEA). Porter's Five Forces Analysis, along with the drivers, restraints, opportunities, and challenges, have been discussed in the report. It also provides company profiles and competitive strategies adopted by the major players in the global SiC fibers market.

Key benefits of buying the report:

The report is expected to help market leaders/new entrants in this market in the following ways:

1. This report segments the global SiC fibers market comprehensively. It 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 SiC fibers 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, expansion and acquisition.

Reasons to buy the report:

The report will help leaders/new entrants in this market by providing them with the closest approximations of the revenues for the overall SiC fibers 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.

## Contents

### 1 INTRODUCTION

#### 1.1 OBJECTIVES OF THE STUDY

#### 1.2 MARKET DEFINITION

##### 1.2.1 INCLUSIONS & EXCLUSIONS

#### 1.3 MARKET SCOPE

#### FIGURE 1 SIC FIBERS MARKET SEGMENTATION

##### 1.3.1 REGIONS COVERED

##### 1.3.2 YEARS CONSIDERED IN THE REPORT

#### 1.4 CURRENCY

#### 1.5 UNIT CONSIDERED

#### 1.6 LIMITATIONS

#### 1.7 STAKEHOLDERS

#### 1.8 SUMMARY OF CHANGES

### 2 RESEARCH METHODOLOGY

#### 2.1 RESEARCH DATA

#### FIGURE 2 SIC FIBERS 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 Key industry insights

###### 2.1.2.3 Breakdown of primary interviews

#### 2.2 MARKET SIZE ESTIMATION

##### 2.2.1 BOTTOM-UP APPROACH

#### FIGURE 3 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH

##### 2.2.2 TOP-DOWN APPROACH

#### FIGURE 4 MARKET SIZE ESTIMATION: TOP-DOWN APPROACH

#### 2.3 DATA TRIANGULATION

#### FIGURE 5 SIC FIBERS MARKET: DATA TRIANGULATION

##### 2.3.1 SUPPLY-SIDE ANALYSIS

##### 2.3.2 DEMAND-SIDE ANALYSIS

#### 2.4 ASSUMPTIONS

#### 2.5 RESEARCH-RELATED LIMITATIONS

### 3 EXECUTIVE SUMMARY

FIGURE 6 THE THIRD-GENERATION SEGMENT TO DRIVE THE SIC FIBERS MARKET DURING THE FORECAST PERIOD

FIGURE 7 CONTINUOUS FORM ACCOUNTED FOR THE LARGEST SHARE IN THE SIC FIBERS MARKET

FIGURE 8 CRYSTALLINE PHASE TO DRIVE THE SIC FIBERS MARKET DURING THE FORECAST PERIOD

FIGURE 9 COMPOSITE USAGE DOMINATED THE SIC FIBERS MARKET

FIGURE 10 AEROSPACE & DEFENSE INDUSTRY TO DRIVE THE SIC FIBERS MARKET, 2020–2025

FIGURE 11 NORTH AMERICA TO REGISTER THE HIGHEST CAGR BETWEEN

**2020 AND 2025**

### 4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES IN THE SIC FIBERS MARKET

FIGURE 12 EMERGING ECONOMIES OFFER LUCRATIVE OPPORTUNITIES TO THE SIC FIBERS MARKET

4.2 SIC FIBERS MARKET SIZE, BY TYPE

FIGURE 13 THIRD-GENERATION SIC FIBERS TO REGISTER THE HIGHEST GROWTH BETWEEN 2020 AND 2025

4.3 SIC FIBERS MARKET SIZE, BY FORM

FIGURE 14 CONTINUOUS FORM TO LEAD THE SIC FIBERS MARKET DURING THE FORECAST PERIOD

4.4 SIC FIBERS MARKET SIZE, BY PHASE

FIGURE 15 AMORPHOUS PHASE DOMINATED THE SIC FIBERS MARKET IN 2019

4.5 SIC FIBERS MARKET, BY USAGE

FIGURE 16 COMPOSITES USAGE DOMINATED SIC FIBERS MARKET IN 2019

4.6 SIC FIBERS MARKET, BY REGION AND END-USE INDUSTRY

FIGURE 17 AEROSPACE & DEFENSE TO REGISTER THE HIGHEST CAGR IN THE SIC FIBERS MARKET, 2020–2025

4.7 SIC FIBERS MARKET, BY COUNTRY

FIGURE 18 THE US TO BE THE FASTEST-GROWING MARKET, 2020–2025

### 5 MARKET OVERVIEW

## 5.1 INTRODUCTION

## 5.2 MARKET DYNAMICS

### FIGURE 19 DRIVERS, RESTRAINTS, OPPORTUNITIES & CHALLENGES IN THE SiC FIBERS MARKET

#### 5.2.1 DRIVERS

5.2.1.1 Government stimulus package for the aerospace industry  
amid the COVID-19 crisis

5.2.1.2 Capacity expansions due to rise in production of LEAP engines

5.2.1.3 Increase in demand for fuel-efficient aircraft

5.2.1.4 Increased investments in manufacturing SiC fiber-based  
CMCs for land-based gas turbine engines

#### 5.2.2 RESTRAINTS

5.2.2.1 High cost of SiC fibers

5.2.2.2 Decrease in the number of aircraft deliveries and reduced  
aircraft production

5.2.2.3 Disruption in the supply chain and lower production capacity utilization due to  
COVID-19 pandemic

#### 5.2.3 OPPORTUNITIES

5.2.3.1 Increase in R&D for manufacturing accident-tolerant and  
lightweight nuclear reactors

5.2.3.2 Reduction of SiC fiber costs

5.2.3.3 Emergence of Chinese players

5.2.3.4 Boeing 737 MAX coming back into operation and FAA  
clearance for GE9X

#### 5.2.4 CHALLENGES

5.2.4.1 Technological challenges in manufacturing low-cost SiC fibers

5.2.4.2 Maintain uninterrupted supply chain and operate at full  
production capacity

5.2.4.3 Liquidity crunch

## 5.3 SUPPLY CHAIN ANALYSIS

### TABLE 1 SiC FIBERS MARKET: SUPPLY CHAIN

## 5.4 PORTER'S FIVE FORCES ANALYSIS

### FIGURE 20 SiC FIBERS 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 SiC FIBERS MARKET: PORTER'S FIVE FORCES ANALYSIS

## 5.5 ECOSYSTEM: SIC FIBERS MARKET

## 5.6 VALUE CHAIN ANALYSIS

### FIGURE 21 VALUE CHAIN ANALYSIS

## 5.7 IMPACT OF COVID-19 ON SIC FIBERS VALUE CHAIN

### 5.7.1 RAW MATERIALS

### 5.7.2 INTERMEDIATES

### 5.7.3 MOLDER

### 5.7.4 OEM/ASSEMBLY

## 5.8 TECHNOLOGY ANALYSIS

## 5.9 PRICING ANALYSIS

## 5.10 AVERAGE SELLING PRICE

### TABLE 3 SIC FIBERS: AVERAGE SELLING PRICE, BY REGION

## 5.11 KEY MARKET FOR IMPORT/EXPORT

### 5.11.1 US

### 5.11.2 JAPAN

### 5.11.3 GERMANY

### 5.11.4 FRANCE

### 5.11.5 UK

### 5.11.6 CHINA

## 5.12 TARIFF AND REGULATIONS

## 5.13 CASE STUDY ANALYSIS

## 5.14 SIC FIBERS: YC AND YCC SHIFT

## 5.15 REVENUE ANALYSIS OF TOP MARKET PLAYERS

## 5.16 PATENT ANALYSIS

### 5.16.1 METHODOLOGY

### 5.16.2 DOCUMENT TYPE

### FIGURE 22 PATENTS APPLICATION VS PATENTS GRANTED, 2010–2020

### FIGURE 23 PATENT PUBLICATION TRENDS, 2010–2020

### 5.16.3 INSIGHTS

### 5.16.4 JURISDICTION ANALYSIS

### 5.16.5 JURISDICTION ANALYSIS FOR SIC FIBERS

### FIGURE 24 PATENT JURISDICTION ANALYSIS FOR SIC FIBERS (2010–2020)

### 5.16.6 TOP COMPANIES/APPLICANTS

#### 5.16.6.1 List of Patents by Centre Nat Rech Scient

#### 5.16.6.2 List of Patents by General Electric Company

#### 5.16.6.3 List of Patents by Herakles

#### 5.16.6.4 List of Patents by Applied Nano Structured Solutions, LLC

#### 5.16.6.5 List of Patents by Safran Ceramics

#### 5.16.6.6 List of Patents by Ube Industries



- 5.16.7 TOP 20 PATENT OWNERS (US) IN THE LAST 10 YEARS
- 5.16.8 MAJOR PATENTS IN THE AEROSPACE INDUSTRY
- 5.16.9 MAJOR APPLICATIONS OF SIC FIBERS IN THE AEROSPACE INDUSTRY AND TIMELINE FOR COMMERCIALIZATION

## **6 SIC FIBERS MARKET, BY TYPE**

### **6.1 INTRODUCTION**

FIGURE 25 THIRD-GENERATION SIC FIBERS TO REGISTER THE HIGHEST CAGR DURING THE FORECAST PERIOD

TABLE 4 SIC FIBERS MARKET SIZE, BY TYPE, 2018-2025 (USD MILLION)

TABLE 5 SIC FIBERS MARKET SIZE, BY TYPE, 2018-2025 (TON)

### **6.2 FIRST GENERATION**

TABLE 6 FIRST-GENERATION SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (USD MILLION)

TABLE 7 FIRST-GENERATION SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (TON)

TABLE 8 MAJOR COMMERCIALY AVAILABLE FIRST-GENERATION SIC FIBERS

### **6.3 SECOND GENERATION**

TABLE 9 SECOND-GENERATION SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (USD MILLION)

TABLE 10 SECOND-GENERATION SIC FIBERS MARKET SIZE, BY REGION, 2020–2025 (TON)

TABLE 11 MAJOR COMMERCIALY AVAILABLE SECOND-GENERATION SIC FIBERS

### **6.4 THIRD GENERATION**

FIGURE 26 NORTH AMERICA TO LEAD THIRD-GENERATION SIC FIBERS MARKET

TABLE 12 THIRD-GENERATION SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (USD MILLION)

TABLE 13 THIRD-GENERATION SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (TON)

TABLE 14 MAJOR COMMERCIALY AVAILABLE THIRD-GENERATION SIC FIBERS

## **7 SIC FIBERS MARKET, BY PHASE**

### **7.1 INTRODUCTION**

FIGURE 27 CRYSTALLINE PHASE TO LEAD THE SIC FIBERS MARKET DURING THE FORECAST PERIOD

TABLE 15 SIC FIBERS MARKET SIZE, BY PHASE, 2018-2025 (USD MILLION)

TABLE 16 SIC FIBERS MARKET SIZE, BY PHASE, 2018-2025 (TON)

#### 7.2 AMORPHOUS

TABLE 17 SIC FIBERS MARKET SIZE IN AMORPHOUS PHASE, BY REGION, 2018-2025 (USD MILLION)

TABLE 18 SIC FIBERS MARKET SIZE IN AMORPHOUS PHASE, BY REGION, 2018-2025 (TON)

#### 7.3 CRYSTALLINE

FIGURE 28 NORTH AMERICA TO LEAD THE MARKET IN THE CRYSTALLINE PHASE SEGMENT

TABLE 19 SIC FIBERS MARKET SIZE IN CRYSTALLINE PHASE, BY REGION, 2018-2025 (USD MILLION)

TABLE 20 SIC FIBERS MARKET SIZE IN CRYSTALLINE PHASE, BY REGION, 2018-2025 (TON)

### 8 SIC FIBERS MARKET, BY FORM

#### 8.1 INTRODUCTION

FIGURE 29 CONTINUOUS FORM TO LEAD THE SIC FIBERS MARKET DURING THE FORECAST PERIOD

TABLE 21 SIC FIBERS MARKET SIZE, BY FORM, 2018-2025 (USD MILLION)

TABLE 22 SIC FIBERS MARKET SIZE, BY FORM, 2018-2025 (TON)

#### 8.2 CONTINUOUS

FIGURE 30 NORTH AMERICA TO LEAD THE CONTINUOUS SIC FIBERS MARKET

TABLE 23 CONTINUOUS SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (USD MILLION)

TABLE 24 CONTINUOUS SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (TON)

#### 8.3 WOVEN

TABLE 25 WOVEN SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (USD MILLION)

TABLE 26 WOVEN SIC FIBERS MARKET SIZE, BY REGION, 2018–2025 (TON)

#### 8.4 OTHERS

8.4.1 FELT/MAT

8.4.2 CHOPPED

8.4.3 TWILL

8.4.4 ROPES AND BELTS

TABLE 27 OTHER FORMS: SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (USD MILLION)

TABLE 28 OTHER FORMS: SIC FIBERS MARKET SIZE, BY REGION, 2018-2025 (TON)

## **9 SIC FIBERS MARKET, BY USAGE**

### **9.1 INTRODUCTION**

FIGURE 31 COMPOSITES SEGMENT TO LEAD THE SIC FIBERS MARKET

TABLE 29 SIC FIBERS MARKET SIZE, BY USAGE, 2018-2025 (USD MILLION)

TABLE 30 SIC FIBERS MARKET SIZE, BY USAGE, 2018-2025 (TON)

### **9.2 COMPOSITES**

9.2.1 CERAMIC MATRIX COMPOSITES (CMCS)

9.2.2 POLYMER MATRIX COMPOSITES (PMCS)

9.2.3 METAL MATRIX COMPOSITES (MMCS)

9.2.3.1 Aluminum

9.2.3.2 Titanium

9.2.3.3 Zirconium

TABLE 31 COMPOSITES: SIC FIBERS MARKET SIZE, BY TYPE, 2018-2025 (USD MILLION)

TABLE 32 COMPOSITES: SIC FIBERS MARKET SIZE, BY TYPE, 2018-2025 (TON)

FIGURE 32 NORTH AMERICA TO DOMINATE THE MARKET IN THE COMPOSITES SEGMENT

TABLE 33 SIC FIBERS MARKET SIZE IN COMPOSITES USAGE, BY REGION, 2018-2025 (USD MILLION)

TABLE 34 SIC FIBERS MARKET SIZE IN COMPOSITES USAGE, BY REGION, 2018-2025 (TON)

### **9.3 NON-COMPOSITES**

TABLE 35 SIC FIBERS MARKET SIZE IN NON-COMPOSITES USAGE, BY REGION, 2018-2025 (USD MILLION)

TABLE 36 SIC FIBERS MARKET SIZE IN NON-COMPOSITES USAGE, BY REGION, 2018-2025 (TON)

## **10 SIC FIBERS MARKET, BY END-USE INDUSTRY**

### **10.1 INTRODUCTION**

FIGURE 33 AEROSPACE & DEFENSE INDUSTRY TO LEAD THE SIC FIBERS MARKET BETWEEN 2020 AND 2025

TABLE 37 SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 38 SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

### **10.2 AEROSPACE & DEFENSE**

10.2.1 IMPACT OF COVID-19 ON AIRCRAFT MODELS EMPLOYING SIC FIBERS

**FIGURE 34 NORTH AMERICA TO LEAD THE SIC FIBERS MARKET IN AEROSPACE & DEFENSE INDUSTRY****TABLE 39 SIC FIBERS MARKET SIZE IN AEROSPACE & DEFENSE, BY REGION, 2018–2025 (USD MILLION)****TABLE 40 SIC FIBERS MARKET SIZE IN AEROSPACE & DEFENSE, BY REGION, 2018–2025 (TON)****TABLE 41 SIC FIBERS MARKET SIZE IN AEROSPACE & DEFENSE, BY TYPE, 2018–2025 (USD MILLION)****TABLE 42 SIC FIBERS MARKET SIZE IN AEROSPACE & DEFENSE, BY TYPE, 2018–2025 (TON)****TABLE 43 SIC FIBERS MARKET SIZE IN AEROSPACE & DEFENSE, BY FORM, 2018–2025 (USD MILLION)****TABLE 44 SIC FIBERS MARKET SIZE IN AEROSPACE & DEFENSE, BY FORM, 2018–2025 (TON)****TABLE 45 NUMBER OF NEW COMMERCIAL AIRPLANE DELIVERIES, BY REGION (2019–2038)****10.2.2 IMPORTANT FACTORS DRIVING THE SIC FIBER DEMAND IN THE AEROSPACE & DEFENSE INDUSTRY****10.3 ENERGY & POWER****TABLE 46 SIC FIBERS MARKET SIZE IN ENERGY & POWER, BY REGION, 2018–2025 (USD MILLION)****TABLE 47 SIC FIBERS MARKET SIZE IN ENERGY & POWER, BY REGION, 2018–2025 (TON)****TABLE 48 GLOBAL NUMBER OF NUCLEAR REACTORS INSTALLED, 2019****10.4 INDUSTRIAL****TABLE 49 SIC FIBERS MARKET SIZE IN INDUSTRIAL SEGMENT, BY REGION, 2018–2025 (USD MILLION)****TABLE 50 SIC FIBERS MARKET SIZE IN INDUSTRIAL SEGMENT, BY REGION, 2018–2025 (TON)****10.5 OTHERS****TABLE 51 SIC FIBERS MARKET SIZE IN OTHER END-USE INDUSTRIES, BY REGION, 2018–2025 (USD MILLION)****TABLE 52 SIC FIBERS MARKET SIZE IN OTHER END-USE INDUSTRIES, BY REGION, 2018–2025 (TON)****11 SIC FIBERS MARKET, BY REGION****11.1 INTRODUCTION****FIGURE 35 US TO BE THE FASTEST-GROWING SIC FIBERS MARKET***SiC Fibers Market by Type (First, Second, and Third Generation), Form (Continuous, Woven, Others), Phase (Amor...*

TABLE 53 SIC FIBERS MARKET SIZE, BY REGION, 2018–2025 (USD MILLION)

TABLE 54 SIC FIBERS MARKET SIZE, BY REGION, 2018–2025 (TON)

## 11.2 NORTH AMERICA

FIGURE 36 NORTH AMERICA: SIC FIBERS MARKET SNAPSHOT

TABLE 55 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (USD MILLION)

TABLE 56 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (TON)

TABLE 57 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (USD MILLION)

TABLE 58 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (TON)

TABLE 59 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (USD MILLION)

TABLE 60 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (TON)

TABLE 61 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 62 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

TABLE 63 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (USD MILLION)

TABLE 64 NORTH AMERICA: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (TON)

### 11.2.1 US

TABLE 65 US: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 66 US: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

### 11.2.2 CANADA

TABLE 67 CANADA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 68 CANADA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

## 11.3 EUROPE

FIGURE 37 EUROPE: SIC FIBERS MARKET SNAPSHOT

TABLE 69 EUROPE: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (USD MILLION)

TABLE 70 EUROPE: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (TON)

TABLE 71 EUROPE: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (USD MILLION)

TABLE 72 EUROPE: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (TON)

TABLE 73 EUROPE: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (USD MILLION)

TABLE 74 EUROPE: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (TON)

TABLE 75 EUROPE: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 76 EUROPE: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

TABLE 77 EUROPE: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (USD MILLION)

TABLE 78 EUROPE: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (TON)

#### 11.3.1 FRANCE

TABLE 79 FRANCE: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 80 FRANCE: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

#### 11.3.2 GERMANY

TABLE 81 GERMANY: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

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

#### 11.3.3 UK

TABLE 83 UK: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 84 UK: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

#### 11.3.4 ITALY

TABLE 85 ITALY: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 86 ITALY: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

#### 11.3.5 SPAIN

TABLE 87 SPAIN: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 88 SPAIN: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

#### 11.3.6 REST OF EUROPE

TABLE 89 REST OF EUROPE: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 90 REST OF EUROPE: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

#### 11.4 APAC

FIGURE 38 APAC: SIC FIBERS MARKET SNAPSHOT

TABLE 91 APAC: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (USD MILLION)

TABLE 92 APAC: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (TON)

TABLE 93 APAC: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (USD MILLION)

TABLE 94 APAC: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (TON)

TABLE 95 APAC: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (USD MILLION)

TABLE 96 APAC: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (TON)

TABLE 97 APAC: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 98 APAC: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

TABLE 99 APAC: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (USD MILLION)

TABLE 100 APAC: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (TON)

##### 11.4.1 JAPAN

TABLE 101 JAPAN: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 102 JAPAN: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

##### 11.4.2 CHINA

TABLE 103 CHINA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 104 CHINA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

##### 11.4.3 SOUTH KOREA

TABLE 105 SOUTH KOREA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 106 SOUTH KOREA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

##### 11.4.4 REST OF APAC

TABLE 107 REST OF APAC: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 108 REST OF APAC: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY,



2018–2025 (TON)

#### 11.5 LATIN AMERICA

TABLE 109 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (USD MILLION)

TABLE 110 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (TON)

TABLE 111 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (USD MILLION)

TABLE 112 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (TON)

TABLE 113 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (USD MILLION)

TABLE 114 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (TON)

TABLE 115 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 116 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

TABLE 117 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (USD MILLION)

TABLE 118 LATIN AMERICA: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (TON)

##### 11.5.1 BRAZIL

TABLE 119 BRAZIL: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 120 BRAZIL: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

##### 11.5.2 MEXICO

TABLE 121 MEXICO: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 122 MEXICO: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

##### 11.5.3 REST OF LATIN AMERICA

TABLE 123 REST OF LATIN AMERICA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 124 REST OF LATIN AMERICA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

#### 11.6 MEA

TABLE 125 MEA: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (USD MILLION)



TABLE 126 MEA: SIC FIBERS MARKET SIZE, BY TYPE, 2018–2025 (TON)

TABLE 127 MEA: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (USD MILLION)

TABLE 128 MEA: SIC FIBERS MARKET SIZE, BY FORM, 2018–2025 (TON)

TABLE 129 MEA: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (USD MILLION)

TABLE 130 MEA: SIC FIBERS MARKET SIZE, BY USAGE, 2018–2025 (TON)

TABLE 131 MEA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 132 MEA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

TABLE 133 MEA: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (USD MILLION)

TABLE 134 MEA: SIC FIBERS MARKET SIZE, BY COUNTRY, 2018–2025 (TON)

#### 11.6.1 ISRAEL

TABLE 135 ISRAEL: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 136 ISRAEL: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

#### 11.6.2 UAE

TABLE 137 UAE: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 138 UAE: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

#### 11.6.3 REST OF MEA

TABLE 139 REST OF MEA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (USD MILLION)

TABLE 140 REST OF MEA: SIC FIBERS MARKET SIZE, BY END-USE INDUSTRY, 2018–2025 (TON)

## 12 COMPETITIVE LANDSCAPE

### 12.1 INTRODUCTION

FIGURE 39 CAPACITY EXPANSION IS THE KEY GROWTH STRATEGY ADOPTED BETWEEN 2013 AND 2020

### 12.2 MARKET SHARE ANALYSIS

FIGURE 40 NGS ADVANCED FIBERS (AN AFFILIATE OF NIPPON CARBON) LED THE SIC FIBERS MARKET IN 2019

TABLE 141 DEGREE OF COMPETITION: CONSOLIDATED

### 12.3 MARKET RANKING

**FIGURE 41 MARKET RANKING OF KEY PLAYERS****12.4 MARKET EVALUATION FRAMEWORK****TABLE 142 SIC FIBERS MARKET: NEW PRODUCT LAUNCH/DEVELOPMENT, 2013-2020****TABLE 143 SIC FIBERS MARKET: DEALS, 2013-2020****12.5 REVENUE ANALYSIS OF TOP MARKET PLAYERS****TABLE 144 REVENUE ANALYSIS OF TOP MARKET PLAYERS, 2019 (USD MILLION)****12.6 COMPANY EVALUATION MATRIX****TABLE 145 COMPANY PRODUCT FOOTPRINT****TABLE 146 COMPANY APPLICATION FOOTPRINT****TABLE 147 COMPANY REGION FOOTPRINT****12.6.1 STAR****12.6.2 PERVASIVE****12.6.3 PARTICIPANTS****12.6.4 EMERGING LEADERS****FIGURE 42 SIC FIBERS MARKET (GLOBAL): COMPETITIVE LEADERSHIP MAPPING, 2019****FIGURE 43 STRENGTH OF PRODUCT PORTFOLIO****FIGURE 44 BUSINESS STRATEGY EXCELLENCE****13 COMPANY PROFILES****13.1 KEY PLAYERS**

(Business Overview, Products Offered, Recent Developments, SWOT Analysis, Winning imperatives, Current strategies, Threat from competition, right to win)\*

**13.1.1 NGS ADVANCED FIBERS****TABLE 148 NGS ADVANCED FIBERS: BUSINESS OVERVIEW****13.1.2 UBE INDUSTRIES****TABLE 149 UBE INDUSTRIES: BUSINESS OVERVIEW****FIGURE 45 UBE INDUSTRIES: COMPANY SNAPSHOT****13.1.3 COI CERAMICS, INC.****TABLE 150 COI CERAMICS, INC.: BUSINESS OVERVIEW****13.1.4 GE AVIATION****TABLE 151 GE AVIATION: BUSINESS OVERVIEW****FIGURE 46 GE AVIATION: COMPANY SNAPSHOT****13.1.5 SPECIALTY MATERIALS, INC.****TABLE 152 SPECIALTY MATERIALS, INC.: BUSINESS OVERVIEW****13.1.6 MATECH****TABLE 153 MATECH: BUSINESS OVERVIEW**

### 13.1.7 HAYDALE TECHNOLOGIES

TABLE 154 HAYDALE: BUSINESS OVERVIEW

### 13.1.8 SUZHOU SAIFEI GROUP

TABLE 155 SUZHOU SAIFEI GROUP: BUSINESS OVERVIEW

### 13.1.9 BJS CERAMICS

TABLE 156 BJS CERAMICS: BUSINESS OVERVIEW

### 13.1.10 NINGBO ZHONGXING NEW MATERIALS CO. LTD

TABLE 157 NINGBO ZHONGXING NEW MATERIALS CO. LTD: BUSINESS OVERVIEW

## 13.2 OTHER KEY PLAYERS

### 13.2.1 NASA GLENN RESEARCH CENTER

### 13.2.2 NATIONAL UNIVERSITY OF DEFENSE & TECHNOLOGY

### 13.2.3 TOSHIBA

### 13.2.4 TISICS LTD.

### 13.2.5 INSTITUTE OF ENERGY SCIENCE & TECHNOLOGY

\*Details on Business Overview, Products Offered, Recent Developments, SWOT Analysis, Winning imperatives, Current strategies, Threat from competition, right to win might not be captured in case of unlisted companies.

## 14 .APPENDIX

### 14.1 DISCUSSION GUIDE

### 14.2 KNOWLEDGE STORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

### 14.3 AVAILABLE CUSTOMIZATIONS

### 14.4 RELATED REPORTS

### 14.5 AUTHOR DETAILS

## I would like to order

Product name: SiC Fibers Market by Type (First, Second, and Third Generation), Form (Continuous, Woven, Others), Phase (Amorphous, Crystalline, Usage (Composites, Non-Composites), End-Use Industry, and Region - Global Forecast to 2025

Product link: <https://marketpublishers.com/r/SE7C9D74E52EN.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](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/SE7C9D74E52EN.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