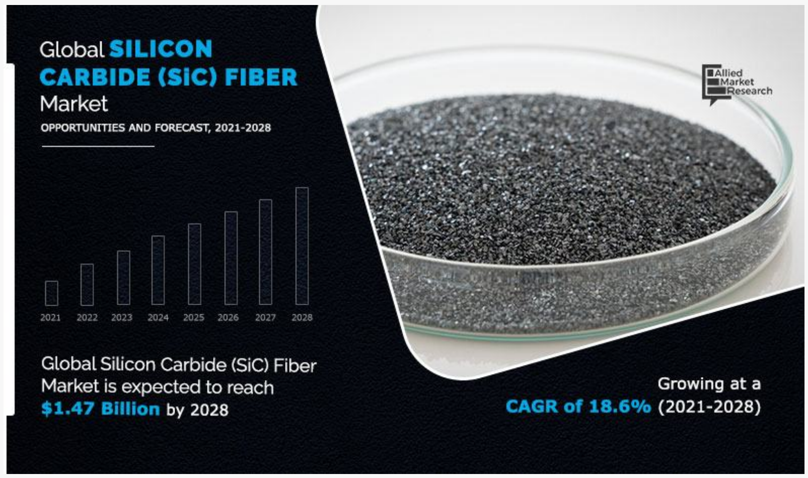
SiC Fiber Market Forecast: North America Leads While Asia-Pacific Accelerates

The aerospace and defense segment dominated the market in 2020, contributing more than two-fifths of the global revenue.



SiC Fiber Market Growing Demand

WILMINGTON, DE, UNITED STATES, July 2, 2026 /EINPresswire.com/ -- According to a report published by Allied Market Research titled "SiC Fiber Market by Phase (Crystalline and Amorphous) and Application (Aerospace & Defense, Energy & Power, Industrial, and Others): Global Opportunity Analysis and Industry Forecast, 2021–2028," the global silicon carbide (SiC) fiber market was valued at $0.38 billion in 2020 and is projected to reach $1.47 billion by 2028, registering a CAGR of 18.6% from 2021 to 2028.

□□□□□□□□□ □□□□□□□ □□□□□□ □□ □□□□□□□□□ □□□□□□□□□:
https://www.alliedmarketresearch.com/request-sample/11840

Market Dynamics:-

Key Growth Drivers:

- Rising demand for SiC fibers across the aerospace and defense industry.
- Increasing adoption of SiC fibers in energy and power applications due to their superior thermal and mechanical performance.

Market Challenges:

- Reduced demand for non-essential products during the COVID-19 pandemic temporarily hindered market growth.
- Supply chain disruptions and restrictions on international trade impacted the availability of raw

materials and finished products.

Emerging Opportunities:

- Growing demand for advanced non-oxide SiC fibers is expected to unlock significant growth opportunities, supported by expanding applications in high-performance industrial sectors.

Segment Insights:-

Crystalline Segment Leads the Market:

Based on phase, the crystalline segment accounted for the largest market share in 2020, representing nearly three-fifths of the global market. The segment is expected to maintain its leadership through 2028 owing to its exceptional properties, including:

- High thermal resistance
- Superior mechanical strength
- Excellent chemical stability
- High modulus

Meanwhile, the amorphous segment is anticipated to register the fastest CAGR of 19.3% during the forecast period. Increasing utilization in aerospace, aviation, power generation, and metallurgical industries continues to support its rapid growth.

Aerospace & Defense Remains the Largest Application:

The aerospace and defense segment dominated the market in 2020, contributing more than two-fifths of the global revenue. It is also projected to witness the highest CAGR of 19.2% through 2028.

SiC fibers are increasingly preferred for aerospace applications because they offer:

- Lightweight construction
- Outstanding heat resistance
- High durability
- Excellent chemical stability
- Shock and creep resistance

These performance advantages make them ideal for aircraft engine insulation, turbine components, ceramic matrix composites, and other high-temperature aerospace applications.

Regional Outlook:-

North America Holds the Largest Market Share:

- North America accounted for more than 50% of the global SiC fiber market in 2020 and is expected to maintain its leading position throughout the forecast period. Growing investments in aerospace and defense manufacturing, particularly in the United States, continue to drive demand for SiC fibers used in aircraft engines and turbine systems.

Asia-Pacific to Record the Fastest Growth:

- The Asia-Pacific region is forecast to grow at the highest CAGR of 21.5% between 2021 and 2028. Rapid expansion of China's defense industry, increasing industrialization, and rising investments in advanced materials are expected to fuel regional market growth.

Leading Market Participants:-

Major companies operating in the global SiC fiber market include:

- BJS Ceramics GmbH
- Free Form Fibers LLC
- Haydale Technologies Inc.
- NGS Advanced Fibers Co., Ltd.
- UBE Industries Ltd.
- American Elements
- Nippon Carbon Co., Ltd.
- GE Aviation
- Saint-Gobain
- SGL Carbon SE

□□□□ □□ □□□□□□ □□□ □□□□□□□□□□□ □□□□ □□□ □□□□□□, □□□ □□□□□□□' □□□□□□□□□□:
https://www.alliedmarketresearch.com/sic-fiber-market/purchase-options

About Us:

Allied Market Research provides global enterprises as well as medium and small businesses with unmatched quality of "Market Research Reports" and "Business Intelligence Solutions." AMR has a targeted view to provide business insights and consulting to assist its clients to make strategic business decisions and achieve sustainable growth in their respective market domain.

Pawan Kumar, the CEO of Allied Market Research, is leading the organization toward providing high-quality data and insights. We are in professional corporate relations with various companies and this helps us in digging out market data that helps us generate accurate research data tables and confirms utmost accuracy in our market forecasting. Each and every data presented in the reports published by us is extracted through primary interviews with top officials from leading companies of domain concerned. Our secondary data procurement methodology includes deep online and offline research and discussion with knowledgeable professionals and analysts in the industry.

David Correa
Allied Market Research
+ 1 800-792-5285
email us here
Visit us on social media:
LinkedIn
Facebook
YouTube
X
