

SiC Powder Market in the U.S. Poised for Robust 6.9% CAGR Expansion by 2035 | FactMR Report

The SiC powder market is growing rapidly, driven by demand from electronics, automotive, and semiconductor industries across global regions.

ROCKVILLE, MD, UNITED STATES, October 13, 2025 /EINPresswire.com/ -- The [SiC powder market](#) is experiencing significant growth, driven by rising demand across electronics, automotive, metallurgical, and abrasive industries. The global SiC powder market is projected to grow from USD 1.98 billion in 2025 to approximately USD 3.80 billion by 2035, recording an absolute increase of USD 1.83 billion over the forecast period. This translates into a total growth of 92.4%, with the market forecast to expand at a compound annual growth rate (CAGR) of 6.7% between 2025 and 2035.



The market's expansion is closely linked to the increasing adoption of wide bandgap semiconductors, electric vehicles, and high-performance industrial materials. SiC powder offers superior thermal conductivity, high temperature resistance, and excellent electrical characteristics, making it an essential material in the next generation of power electronics and advanced manufacturing applications.

Segment Overview: Types, Purity, Particle Size & Applications

The SiC powder market is categorized into several segments based on type, purity level, particle size, and application.

By Type, black silicon carbide powder and green silicon carbide powder dominate the market. Black SiC powder is commonly used in abrasive and metallurgical industries due to its durability and cost efficiency, while green SiC powder, known for its higher purity, is preferred in electronics, semiconductors, and other precision applications that require superior quality and performance.

By Purity Level, the market is divided into 95%–98%, 98%–99%, and above 99%. The 95%–98% range represents the standard grade used in abrasive and refractory sectors. The 98%–99% segment is gaining traction as industries shift toward more advanced applications. The above 99% purity segment is expected to witness rapid growth, driven by demand in semiconductors and power electronics, where high-purity materials are crucial for performance and reliability.

By Particle Size, the SiC powder market includes ranges of 0–1 μm , 1–10 μm , 10–45 μm , and above 45 μm . Submicron particles (0–1 μm) are used in high-precision polishing and ceramics, while 1–10 μm particles are utilized in electronic coatings and fine abrasives. Larger particle sizes above 45 μm find use in metallurgy and refractory materials, where coarser grains are advantageous.

By Application, SiC powder serves multiple industries including electronics and semiconductors, automotive, steel and metallurgy, abrasives, and others. The electronics and semiconductor segment represents a major share of the market, driven by the increasing demand for SiC-based components in power devices and semiconductor substrates. The automotive segment is also growing steadily, fueled by the rising adoption of SiC materials in electric vehicle powertrains and battery management systems. The steel and metallurgy industries rely on SiC for its heat resistance and strengthening properties, while abrasives continue to use it for cutting, grinding, and polishing applications.

Market Drivers & Regional Dynamics

Several factors are propelling the growth of the global SiC powder market. One of the primary drivers is the rising demand for power electronics and energy-efficient components. SiC's ability to operate at higher voltages and temperatures than traditional silicon makes it ideal for high-performance applications in renewable energy systems, electric vehicles, and industrial automation.

The growing adoption of electric and hybrid vehicles is another major factor contributing to market expansion. SiC-based materials are integral in EV power modules, enabling faster charging and greater energy efficiency. Additionally, advancements in materials engineering, including the development of high-purity and fine-grained SiC powders, are enhancing performance characteristics and opening new application areas.

Regionally, Asia Pacific dominates the SiC powder market due to rapid industrialization, strong semiconductor manufacturing capacity, and the expansion of the electric vehicle industry. China

and India, in particular, are emerging as key producers and consumers of SiC powders. North America and Europe are also witnessing significant growth, supported by technological innovation and government initiatives promoting clean energy and electric mobility.

Recent Developments & Competitive Landscape

The SiC powder market is moderately consolidated, with several key players competing based on quality, purity, and innovation. Leading companies such as Washington Mills, Saint-Gobain, ESD-SiC, Ningxia Tianyuan Manganese Industry, Wolfspeed (Cree), Dow, and Shin-Etsu Chemical are investing heavily in research and development to enhance product performance and expand production capacities.

Wolfspeed, for instance, continues to strengthen its position in the semiconductor supply chain by integrating SiC wafer and device manufacturing capabilities. Saint-Gobain, with its wide materials portfolio, focuses on serving both traditional and emerging markets. Shin-Etsu Chemical emphasizes high-purity SiC powders for advanced electronics, while Washington Mills maintains its leadership in abrasive and specialty ceramic applications.

Recent developments in the market highlight a shift toward capacity expansion, strategic collaborations, and technological advancements. Manufacturers are scaling up production facilities to meet growing demand for high-purity and fine-particle SiC powders. Many are also forming partnerships with semiconductor and electric vehicle companies to ensure secure supply chains and co-develop next-generation materials. Innovation efforts are centered on improving synthesis processes, refining particle uniformity, and developing energy-efficient, eco-friendly production methods.

Request for Discount: https://www.factmr.com/connectus/sample?flag=S&rep_id=11209

Buy Now at USD 4500: <https://www.factmr.com/checkout/11209>

Check out More Related Studies Published by Fact.MR Research:

Metallic Pigments Market: <https://www.factmr.com/report/metallic-pigments-market>

Potassium Formate Market: <https://www.factmr.com/report/3851/potassium-formate-market>

Bio-Based Acetic Acid Market: <https://www.factmr.com/report/1189/bio-based-acetic-acid-market>

Calcium Formate Market: <https://www.factmr.com/report/3006/calcium-formate-market>

Editor's Note

Fact.MR is a leading global market research and consulting firm, known for delivering actionable insights across industries. Our study on the SiC Powder Market integrates technology assessment, clinical trends, and regional insights to provide strategic intelligence for healthcare stakeholders. As innovation accelerates in vascular access technologies, Fact.MR continues to guide market participants in capturing opportunities and navigating challenges in this rapidly advancing field.

S. N. Jha

Fact.MR

+1 628-251-1583

sales@factmr.com

This press release can be viewed online at: <https://www.einpresswire.com/article/857745130>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.