+357 96 030922
info@marketpublishers.com

Global Silicon-Carbon Anode for Power Battery Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/G6275CA92BC5EN.html
Date: June 2026
Pages: 124
Price: US$ 4,480.00 (Single User License)
ID: G6275CA92BC5EN

Abstracts

The global Silicon-Carbon Anode for Power Battery market size is expected to reach $ 509 million by 2032, rising at a market growth of 15.6% CAGR during the forecast period (2026-2032).

Silicon-Carbon Anode for Power Battery is an advanced anode material designed for high-energy-density lithium-ion batteries. By incorporating nanoscale silicon into a carbon matrix, it significantly enhances specific capacity while maintaining structural stability and long cycle life. Its advantages include high energy density, excellent charge-discharge efficiency, and extended battery lifespan, effectively improving the range and performance stability of power batteries. The capacity utilization rate in 2025 reached 80%, and the industry's average gross margin was approximately 29%. Production in 2025 totaled 9,132 tons at an average price of 19,600 USD per ton. The upstream segment mainly consists of key raw materials such as metallurgical silicon, silane, graphite, and porous carbon, with representative suppliers including Elkem, Hemlock, and East Hope Group. The midstream focuses on material blending, coating, and particle size control to ensure uniformity and electrochemical performance. Downstream applications are mainly used in automotive power batteries, with downstream customer representatives including CATL, BYD, and LG Energy Solution.

Silicon-Carbon Anode for Power Battery will be increasingly applied as power battery systems move toward longer driving range, faster charging, and higher energy density. Its application value lies in improving lithium storage capacity while using carbon frameworks to reduce silicon expansion and maintain cycling stability under high-current operation. In electric vehicles, material adoption will depend on compatibility with high-nickel cathode systems, fast-charging platforms, and large-scale cell manufacturing processes. Future development will be driven by long-range vehicle models, high-

+357 96 030922
info@marketpublishers.com

voltage battery platforms, and battery manufacturers' demand for anode materials that balance capacity, safety, and durability.

This report studies the global Silicon-Carbon Anode for Power Battery production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Silicon-Carbon Anode for Power Battery and provides market size (US$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Silicon-Carbon Anode for Power Battery that contribute to its increasing demand across many markets.

Highlights and key features of the study
Global Silicon-Carbon Anode for Power Battery total production and demand, 2021-2032, (Tonnes)
Global Silicon-Carbon Anode for Power Battery total production value, 2021-2032, (USD Million)
Global Silicon-Carbon Anode for Power Battery production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Tonnes), (based on production site)
Global Silicon-Carbon Anode for Power Battery consumption by region & country, CAGR, 2021-2032 & (Tonnes)
U.S. VS China: Silicon-Carbon Anode for Power Battery domestic production, consumption, key domestic manufacturers and share
Global Silicon-Carbon Anode for Power Battery production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Tonnes)
Global Silicon-Carbon Anode for Power Battery production by Type, production, value, CAGR, 2021-2032, (USD Million) & (Tonnes)
Global Silicon-Carbon Anode for Power Battery production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Tonnes)

This report profiles key players in the global Silicon-Carbon Anode for Power Battery market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Group14 Technologies (USA), Sila Nanotechnologies (USA), Amprius (USA), Zhide Battery (China), Nexeon (UK), Ningbo Shanshan (China), Putailai (China), BTR New Material Group (China), SG Nano (China), Tianmulake Excellent Anode Materials Co (China), etc.

+357 96 030922
info@marketpublishers.com

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Silicon-Carbon Anode for Power Battery market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US$ Millions), volume (production, consumption) & (Tonnes) and average price (US$/Ton) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Silicon-Carbon Anode for Power Battery Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Silicon-Carbon Anode for Power Battery Market, Segmentation by Type:

D10

D50

+357 96 030922
info@marketpublishers.com

D90

Others

Global Silicon-Carbon Anode for Power Battery Market, Segmentation by Method:

Mechanical Ball Milling

Chemical Vapor Deposition(CVD)

Others

Global Silicon-Carbon Anode for Power Battery Market, Segmentation by Specific Capacity:

Specific Capacity ? 1,000 mAh/g

Specific Capacity ? 1,000 mAh/g

Global Silicon-Carbon Anode for Power Battery Market, Segmentation by Application:

Passenger Cars

Commercial Vehicle

Companies Profiled:

Group14 Technologies (USA)

Sila Nanotechnologies (USA)

Amprius (USA)

Zhide Battery (China)

+357 96 030922
info@marketpublishers.com

Nexeon (UK)

Ningbo Shanshan (China)

Putailai (China)

BTR New Material Group (China)

SG Nano (China)

Tianmulake Excellent Anode Materials Co (China)

Shin Etsu Chemical (Japan)

Key Questions Answered:
1. How big is the global Silicon-Carbon Anode for Power Battery market?
2. What is the demand of the global Silicon-Carbon Anode for Power Battery market?
3. What is the year over year growth of the global Silicon-Carbon Anode for Power Battery market?
4. What is the production and production value of the global Silicon-Carbon Anode for Power Battery market?
5. Who are the key producers in the global Silicon-Carbon Anode for Power Battery market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS

4 UNITED STATES VS CHINA VS REST OF THE WORLD

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

5 MARKET ANALYSIS BY TYPE

6 MARKET ANALYSIS BY METHOD

7 MARKET ANALYSIS BY SPECIFIC CAPACITY

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Silicon-Carbon Anode for Power Battery Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/G6275CA92BC5EN.html

Price: US$ 4,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G6275CA92BC5EN.html