

The Carbon Foam Market is anticipated to register a CAGR of 8.5% during 2023 – 2028 - Market Size, Share, Forecasts, and Trends Analysis Report by Mordor Intelligence.

According to a new market research report titled "Carbon Foam Market – (2023 – 2028)," the market is expected to register a CAGR of 8.5%. In the short term, rising carbon foam usage in the aerospace and defense industries is a key factor driving market demand. The increased emphasis on developing low-cost carbon foam will likely create market opportunities in the coming years. North America is expected to dominate the market and register the highest CAGR during the forecast period.

Increasing usage in the aerospace and defense industry:

According to the Boeing Commercial Outlook 2022-2041, the total global deliveries of new airplanes are estimated to be 41,170 by 2041. Due to such massive deliveries, the demand for carbon foam is expected to rise globally during the forecast period.

According to our research experts, some of the major market trends shaping the Carbon Foam Market are:

- Carbon foam can be used in thermal protection systems and structural panels for EMI shielding and radar-absorbing applications.
- It can also be used for stealth technology, an essential aspect of the upcoming fifth-generation aircraft.
- Due to its lightweight nature, strength, and excellent thermal properties, it is also used in rocket nozzle systems, even in harsh environments.
- Solid rocket motors generate their thrust by burning a solid propellant to generate hot gases, which are exhausted through a nozzle.
- Graphitic carbon foam can protect against blast energy, directed energy weapons, and electromagnetic pulse threats.
- In February 2022, the China Aerodynamics Research and Development Centre tested carbon foam-based coatings on hypersonic weapons to enhance their performance.
- It was found that carbon foam-based coatings could reduce the impact of shock waves by more than 20% and improve aerodynamic stability dramatically.
- It also mentioned that carbon foam has great application potential as a coating material for future hypersonic flight.

In October 2021, the American Society for Composites acknowledged some of the research work done by the Air Force Research Laboratory. The laboratory developed carbon foam technology and related materials and applied significant systems, such as those in the Boeing 787 Dreamliner and Air Force and NASA satellites, and composite tooling.

The US is poised to dominate the North American region:

The market is expected to be dominated by the North American region. The United States has one of the largest and most powerful economies in the region. Scientists from the USDA Forest Service's Forest

Products Lab and Ligsteel LLC collaborated with Domtar Inc. in July 2021 to produce high-value carbon foam from lignin, a material found in plant cell walls that hardens carbon foam. Lignin is cheap and abundant, with the pulp and paper industry producing 70 million tons per year.

According to the IEA, in the United States, the federal aim is for electric vehicles (EVs) to make up 50% of new passenger cars and light trucks sold by 2030. Moreover, as per the International Council on Clean Transportation, in 2020, the California government announced an executive order which directs the state to require that, by 2035, all new cars and passenger trucks sold in California be zero-emission vehicles, including BEVs and PHEVs.

The commercial fleet is forecasted to increase to 8,756 in 2041, with an average annual growth rate of 2% per year. This is expected to increase the market demand from multiple applications in the aerospace industry.

Who are the key players in the Carbon Foam Market?

The carbon foam market is currently consolidated in nature, where the top players hold the majority share of the market:

- Koppers Inc.
- Ultramet
- ERG Aerospace
- CONSOL Energy Inc.
- Entegris Inc.
- Firefly International Energy
- ERG Aerospace
- American Elements
- Xiamen Zopin New Material Limited

Recent developments in the Carbon Foam Market:

- In July 2022, CFOAM Limited initiated the sale of its 74.34% interest in CFOAM Corp. to CONSOL Energy Inc., a coal mining company.
- In July 2021, carbon foam manufacturer, Cfoam, established a new disruptive technology to make carbon foam products from coal. The company updated the market on the progress of a US government-funded project to commission a new carbon foam product facility in West Virginia.

In a nutshell, the Mordor Intelligence Market Research Report is a must-read for start-ups, industry players, investors, researchers, consultants, business strategists, and all those who are looking to understand this industry. Get a glance at the <https://www.mordorintelligence.com/industry-reports/carbon-foam-market>

About Mordor Intelligence:

Mordor Intelligence is a market intelligence and advisory firm. At Mordor Intelligence, we believe in predicting butterfly effects that have the potential to change or significantly impact market dynamics.

Our market research reports are comprehensive and provide exclusive data, facts and figures, trends, and the competitive landscape of the industry.

Mordor Intelligence constantly tracks industry trends. Some relevant market reports from the analysts that might be of interest to you:

- <https://www.mordorintelligence.com/industry-reports/activated-carbon-market>
- <https://www.mordorintelligence.com/industry-reports/carbon-fiber-market>
- <https://www.mordorintelligence.com/industry-reports/carbon-fiber-tape-market>
- <https://www.mordorintelligence.com/industry-reports/carbon-prepreg-market>
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