

Aerogels

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Abstracts

Report Scope:

This report provides an updated review of aerogel technology, including materials and fabrication processes and identifies current and emerging applications for aerogels.

BCC Research determines the current market status for aerogels, defines trends and presents growth forecasts for the next five years. The aerogel market is based on the following segments: material, shape, application and region. In addition, technological issues (including key events and the latest process developments) are discussed. More specifically, the market analysis conducted by BCC Research for this report is divided into five sections.

In the first section, an introduction to the topic and a historical review of aerogel technology are provided, including an outline of recent events. In this section, current and emerging applications of aerogels are also identified and divided by sector (i.e., thermal and acoustic insulation, electronics and optoelectronics, chemical/mechanical/environmental, life science and personal care, sensors and instrumentation, energy, aerospace and space exploration, consumer products, defense and others).

The second section provides a technological review of aerogels. This section offers a revised and detailed description of aerogel materials, properties, shapes and sizes, aerogel fabrication methods and recent process upgrades. This section concludes with an analysis of the most important technological developments since 2016, including examples of significant patents recently issued or applied for, as well as highlighting the most active research organizations operating in the field.

The third section entails a global market analysis of aerogels. Global revenues (sales



data in millions of dollars) are presented for each segment (shape, material, application and region) with actual data for the years 2017, 2018, 2019 and estimated revenues for 2023.

The analysis of current revenues for aerogel-based products is followed by a detailed presentation of market growth trends based on industry growth, technological trends, unit price trends and regional trends. The third section concludes with projected aerogel revenues within each segment and a forecast of compound annual growth rates (CAGRs) for 2019 through 2023.

In the fourth section of the report, which covers global industry structure, the report offers a list of the leading suppliers of aerogels and a description of products. The analysis includes a description of the geographical distribution of these firms and an evaluation of other key industry players. Detailed company profiles of the top players are also provided.

The fifth and final section includes an extensive U.S. patent analysis with a summary of patents related to aerogel materials, formulations, fabrication processes and applications. The patents examined in this study were issued from 2019-2023. Patent analysis is performed by region, country, assignee and patent category.

Report Includes:

25 data tables and 26 additional tables

An overview of the global aerogel market with the review of aerogel technology, including materials and fabrication processes and identification of current and emerging applications for aerogels

Analyses of global market trends, with data corresponding to market size from 2017 to 2019, and projections of compound annual growth rates (CAGRs) through 2023

Discussion on research and development, technological aspects, and commercialization of aerogels, and information on environmentally friendly aerogel compositions and applications

Relevant patent analysis and market share analysis of the key companies of the industry, their strategic profiling, and their competitive landscape



Profiles of major players in the industry, including Active Aerogels, Blueshift, Dow Corning, JIOS Aerogel, Nano Tech, Reticle and TAASI Corp.



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