

## Industrial Ceramics Market Expected to Reach \$12 Billion by 2031 | AGC Khyati Elan Anderman Kyocera Schaefer LSP

Industrial ceramics offer high hardness, high wear resistance, high compressive strength, enormous electrical resistance, and strong corrosion resistance.

WILMINGTON, DE, UNITED STATES, December 16, 2024 /EINPresswire.com/ -- Industrial Ceramics Market Overview

A recent report by Allied Market Research titled "Industrial Ceramics Market" reveals that the market, valued at \$6.7 billion in 2021, is projected to reach \$12 billion by 2031, registering a compound annual growth rate (CAGR) of 5.9% from 2022 to 2031. Industrial ceramics are defined as inorganic, non-metallic materials known for their exceptional strength, hardness, high melting points, chemical inertness, and low thermal and electrical conductivity.

Download PDF Sample Copy: <u>https://www.alliedmarketresearch.com/request-sample/A13600</u>

Market Growth Drivers

The industrial ceramics market is experiencing robust growth due to the increasing substitution of metals and plastics with ceramic-based materials. Industrial ceramics enhance properties such as hardness, wear resistance, compressive strength, electrical resistance, and corrosion resistance. Advanced ceramics, like silicon carbide manufactured through chemical vapor deposition (CVD), offer additional benefits, including improved thermal and electrical conductivity.

The adoption of advanced ceramics is expected to grow significantly across industries such as automotive, power and energy, telecommunications, and healthcare during the forecast period. In the automotive sector, the demand for durable and reliable components has increased the use of industrial ceramics in applications such as sensors, mechanical seals, bearings, and valves. Their superior thermal and electrical properties make them essential in automotive manufacturing processes.

Key Innovations in the Market

Leading players in the industrial ceramics industry are focused on innovation and product

development. For example:

CeramTec introduced AIN (aluminum nitride) HP in 2022, a high-performance substrate ideal for power converters due to its excellent thermal conductivity.

In 2021, the company launched ROCAR 3D, a cost-effective 3D printing process for creating construction elements from technical ceramics.

These advancements highlight the potential of industrial ceramics in diverse sectors, including power and energy, where their lower thermal expansion compared to standard alloys provides significant advantages.

Challenges in the Industrial Ceramics Market

Despite their many benefits, industrial ceramics face several technical limitations. These include low tensile strength, challenges in achieving precise component shapes, and dimensional tolerances. Additionally, traditional machining processes like milling, turning, and drilling are unsuitable for ceramics due to their brittleness, which can lead to cracks, fractures, and edge chipping. These challenges pose hurdles to market expansion.

Market Segmentation

The industrial ceramics market is segmented based on material type, product type, end user, and region:

Material Type: Oxide and non-oxide ceramics.

Product Type: Composite ceramics and monolithic ceramics.

End User: Automotive & aerospace, energy & power, and others (including military & defense and medical sectors).

Region: North America (U.S., Canada, Mexico), Europe (UK, France, Germany, Italy, Rest of Europe), Asia-Pacific (China, Japan, India, South Korea, Rest of Asia-Pacific), and LAMEA (Latin America, Middle East, and Africa).

Purchase Enquiry: <u>https://www.alliedmarketresearch.com/purchase-enquiry/A13600</u>

Key Market Players

Prominent companies profiled in the industrial ceramics market include:

Kyocera Anderman Industrial Ceramics Elan Technology Khyati Ceramics Industrial Ceramic Products, Inc. AGC Ceramics Co., Ltd. Carborundum Universal Limited CM Cera Co., Ltd. LSP Industrial Ceramics, Inc. Schaefer Industrial Ceramic These players adopt strategies such as acquisitions, product launches, and business expansions to strengthen their market positions and maintain competitiveness.

Benefits for Stakeholders

The report provides valuable insights, including:

Analysis of market trends and growth opportunities. Impact assessment of key drivers, restraints, and opportunities. Porter's Five Forces analysis of buyer and supplier dynamics. Quantitative analysis of market performance from 2021 to 2031, enabling stakeholders to identify investment opportunities and market potential.

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

This press release can be viewed online at: https://www.einpresswire.com/article/769356728

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<sup>™</sup>, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2024 Newsmatics Inc. All Right Reserved.