

Advanced Ceramics Market Report by Material Type (Alumina, Titanate, Zirconia, Silicon Carbide, and Others), Class Type (Monolithic Ceramics, Ceramic Coatings, Ceramic Matrix Composites, and Others), End Use Industry (Electrical and Electronics, Medical, Transportation, Defense and Security, Chemical, and Others), and Region 2024-2032

<https://marketpublishers.com/r/A474B78E6871EN.html>

Date: April 2024

Pages: 137

Price: US\$ 3,899.00 (Single User License)

ID: A474B78E6871EN

Abstracts

The global advanced ceramics market size reached US\$ 104.4 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 195.8 Billion by 2032, exhibiting a growth rate (CAGR) of 7% during 2024-2032.

Advanced ceramics are inorganic and non-metallic solids produced from highly refined and purified powders. Some commonly used advanced ceramics include alumina, titanate, zirconia, silicon carbide, and aluminum and silicon nitride. They are widely used in rotors, combustors, furnace heaters, hot gas filtration, fuel cell membranes, gas turbine airfoils, diesel engine filters, and fuel injectors. As compared to conventional ceramics, advanced ceramics have higher strength, stability, abrasion and chemical resistance, and can withstand extreme temperatures. They are also cost-effective and lightweight, offer high performance, improve productivity, and reduce operating costs. As a result, advanced ceramics are extensively used in aerospace, defense, industrial processing, and power generation industries.

Advanced Ceramics Market Trends:

The global advanced ceramics market is primarily being driven by significant growth in the electrical and electronics industry. Advanced ceramics are widely used to produce various electronic components, such as transistor dielectrics, insulators, capacitors,

integrated circuit (IC) packages, and piezoelectric components. Apart from this, increasing product demand in the automotive industry to manufacture spark plugs, clutches, engine filters, sensors for electronic controls, and heat-resistant engine parts is providing a considerable boost to market growth. Additionally, the introduction of advanced ceramics produced from eco-friendly processes and naturally occurring minerals due to the rising concerns regarding environmental degradation is providing an impetus to market growth. Moreover, the widespread product adoption for manufacturing components of various emerging and energy-intensive technologies, such as artificial intelligence (AI), Internet of things (IoT), and fifth generation (5G) telecommunication, due to its durability, low power consumption, non-volatility, and high speed is acting as another growth-inducing factor. Besides this, extensive product utilization in the medical industry, continuous research and development (R&D) activities, and rising product incorporation in military armor and protection equipment are supporting the market toward growth.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global advanced ceramics market report, along with forecasts at the global, regional and country level from 2024-2032. Our report has categorized the market based on material type, class type and end use industry.

Breakup by Material Type:

- Alumina
- Titanate
- Zirconia
- Silicon Carbide
- Others

Breakup by Class Type:

- Monolithic Ceramics
- Ceramic Coatings
- Ceramic Matrix Composites
- Others

Breakup by End Use Industry:

- Electrical and Electronics

Medical
Transportation
Defense and Security
Chemical
Others

Breakup by Region:

North America
United States
Canada
Asia-Pacific
China
Japan
India
South Korea
Australia
Indonesia
Others
Europe
Germany
France
United Kingdom
Italy
Spain
Russia
Others
Latin America
Brazil
Mexico
Others
Middle East and Africa

Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being 3M Company, AGC Inc., Blasch Precision Ceramics Inc., CeramTec GmbH, Compagnie de Saint-Gobain S.A., CoorsTek Inc., Corning Incorporated, Elan Technology, Ferrotec (USA) Corporation (Ferrotec Holdings Corporation), Kyocera Corporation, Materion Corporation, McDanel Advanced Ceramic

Technologies LLC, Morgan Advanced Materials plc and Paul Rauschert GmbH & Co. KG.

Key Questions Answered in This Report

1. What was the size of the global advanced ceramics market in 2023?
2. What is the expected growth rate of the global advanced ceramics market during 2024-2032?
3. What are the key factors driving the global advanced ceramics market?
4. What has been the impact of COVID-19 on the global advanced ceramics market?
5. What is the breakup of the global advanced ceramics market based on the material type?
6. What is the breakup of the global advanced ceramics market based on the class type?
7. What is the breakup of the global advanced ceramics market based on the end use industry?
8. What are the key regions in the global advanced ceramics market?
9. Who are the key players/companies in the global advanced ceramics market?

Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL ADVANCED CERAMICS MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

6 MARKET BREAKUP BY MATERIAL TYPE

- 6.1 Alumina
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
- 6.2 Titanate
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast
- 6.3 Zirconia

- 6.3.1 Market Trends
- 6.3.2 Market Forecast
- 6.4 Silicon Carbide
 - 6.4.1 Market Trends
 - 6.4.2 Market Forecast
- 6.5 Others
 - 6.5.1 Market Trends
 - 6.5.2 Market Forecast

7 MARKET BREAKUP BY CLASS TYPE

- 7.1 Monolithic Ceramics
 - 7.1.1 Market Trends
 - 7.1.2 Market Forecast
- 7.2 Ceramic Coatings
 - 7.2.1 Market Trends
 - 7.2.2 Market Forecast
- 7.3 Ceramic Matrix Composites
 - 7.3.1 Market Trends
 - 7.3.2 Market Forecast
- 7.4 Others
 - 7.4.1 Market Trends
 - 7.4.2 Market Forecast

8 MARKET BREAKUP BY END USE INDUSTRY

- 8.1 Electrical and Electronics
 - 8.1.1 Market Trends
 - 8.1.2 Market Forecast
- 8.2 Medical
 - 8.2.1 Market Trends
 - 8.2.2 Market Forecast
- 8.3 Transportation
 - 8.3.1 Market Trends
 - 8.3.2 Market Forecast
- 8.4 Defense and Security
 - 8.4.1 Market Trends
 - 8.4.2 Market Forecast
- 8.5 Chemical

8.5.1 Market Trends

8.5.2 Market Forecast

8.6 Others

8.6.1 Market Trends

8.6.2 Market Forecast

9 MARKET BREAKUP BY REGION

9.1 North America

9.1.1 United States

9.1.1.1 Market Trends

9.1.1.2 Market Forecast

9.1.2 Canada

9.1.2.1 Market Trends

9.1.2.2 Market Forecast

9.2 Asia-Pacific

9.2.1 China

9.2.1.1 Market Trends

9.2.1.2 Market Forecast

9.2.2 Japan

9.2.2.1 Market Trends

9.2.2.2 Market Forecast

9.2.3 India

9.2.3.1 Market Trends

9.2.3.2 Market Forecast

9.2.4 South Korea

9.2.4.1 Market Trends

9.2.4.2 Market Forecast

9.2.5 Australia

9.2.5.1 Market Trends

9.2.5.2 Market Forecast

9.2.6 Indonesia

9.2.6.1 Market Trends

9.2.6.2 Market Forecast

9.2.7 Others

9.2.7.1 Market Trends

9.2.7.2 Market Forecast

9.3 Europe

9.3.1 Germany

- 9.3.1.1 Market Trends
- 9.3.1.2 Market Forecast
- 9.3.2 France
 - 9.3.2.1 Market Trends
 - 9.3.2.2 Market Forecast
- 9.3.3 United Kingdom
 - 9.3.3.1 Market Trends
 - 9.3.3.2 Market Forecast
- 9.3.4 Italy
 - 9.3.4.1 Market Trends
 - 9.3.4.2 Market Forecast
- 9.3.5 Spain
 - 9.3.5.1 Market Trends
 - 9.3.5.2 Market Forecast
- 9.3.6 Russia
 - 9.3.6.1 Market Trends
 - 9.3.6.2 Market Forecast
- 9.3.7 Others
 - 9.3.7.1 Market Trends
 - 9.3.7.2 Market Forecast
- 9.4 Latin America
 - 9.4.1 Brazil
 - 9.4.1.1 Market Trends
 - 9.4.1.2 Market Forecast
 - 9.4.2 Mexico
 - 9.4.2.1 Market Trends
 - 9.4.2.2 Market Forecast
 - 9.4.3 Others
 - 9.4.3.1 Market Trends
 - 9.4.3.2 Market Forecast
- 9.5 Middle East and Africa
 - 9.5.1 Market Trends
 - 9.5.2 Market Breakup by Country
 - 9.5.3 Market Forecast

10 SWOT ANALYSIS

- 10.1 Overview
- 10.2 Strengths

10.3 Weaknesses

10.4 Opportunities

10.5 Threats

11 VALUE CHAIN ANALYSIS

12 PORTERS FIVE FORCES ANALYSIS

12.1 Overview

12.2 Bargaining Power of Buyers

12.3 Bargaining Power of Suppliers

12.4 Degree of Competition

12.5 Threat of New Entrants

12.6 Threat of Substitutes

13 PRICE ANALYSIS

14 COMPETITIVE LANDSCAPE

14.1 Market Structure

14.2 Key Players

14.3 Profiles of Key Players

14.3.1 3M Company

14.3.1.1 Company Overview

14.3.1.2 Product Portfolio

14.3.1.3 Financials

14.3.1.4 SWOT Analysis

14.3.2 AGC Inc.

14.3.2.1 Company Overview

14.3.2.2 Product Portfolio

14.3.2.3 Financials

14.3.2.4 SWOT Analysis

14.3.3 Blasch Precision Ceramics Inc.

14.3.3.1 Company Overview

14.3.3.2 Product Portfolio

14.3.4 CeramTec GmbH

14.3.4.1 Company Overview

14.3.4.2 Product Portfolio

14.3.5 Compagnie de Saint-Gobain S.A.

- 14.3.5.1 Company Overview
- 14.3.5.2 Product Portfolio
- 14.3.5.3 Financials
- 14.3.5.4 SWOT Analysis
- 14.3.6 CoorsTek Inc.
 - 14.3.6.1 Company Overview
 - 14.3.6.2 Product Portfolio
- 14.3.7 Corning Incorporated
 - 14.3.7.1 Company Overview
 - 14.3.7.2 Product Portfolio
 - 14.3.7.3 Financials
 - 14.3.7.4 SWOT Analysis
- 14.3.8 Elan Technology
 - 14.3.8.1 Company Overview
 - 14.3.8.2 Product Portfolio
- 14.3.9 Ferrotec (USA) Corporation (Ferrotec Holdings Corporation)
 - 14.3.9.1 Company Overview
 - 14.3.9.2 Product Portfolio
- 14.3.10 Kyocera Corporation
 - 14.3.10.1 Company Overview
 - 14.3.10.2 Product Portfolio
 - 14.3.10.3 Financials
 - 14.3.10.4 SWOT Analysis
- 14.3.11 Materion Corporation
 - 14.3.11.1 Company Overview
 - 14.3.11.2 Product Portfolio
 - 14.3.11.3 Financials
 - 14.3.11.4 SWOT Analysis
- 14.3.12 McDanel Advanced Ceramic Technologies LLC
 - 14.3.12.1 Company Overview
 - 14.3.12.2 Product Portfolio
- 14.3.13 Morgan Advanced Materials plc
 - 14.3.13.1 Company Overview
 - 14.3.13.2 Product Portfolio
 - 14.3.13.3 Financials
- 14.3.14 Paul Rauschert GmbH & Co. KG.
 - 14.3.14.1 Company Overview
 - 14.3.14.2 Product Portfolio

List Of Tables

LIST OF TABLES

Table 1: Global: Advanced Ceramics Market: Key Industry Highlights, 2023 & 2032

Table 2: Global: Advanced Ceramics Market Forecast: Breakup by Material Type (in Million US\$), 2024-2032

Table 3: Global: Advanced Ceramics Market Forecast: Breakup by Class Type (in Million US\$), 2024-2032

Table 4: Global: Advanced Ceramics Market Forecast: Breakup by End Use Industry (in Million US\$), 2024-2032

Table 5: Global: Advanced Ceramics Market Forecast: Breakup by Region (in Million US\$), 2024-2032

Table 6: Global: Advanced Ceramics Market: Competitive Structure

Table 7: Global: Advanced Ceramics Market: Key Players

List Of Figures

LIST OF FIGURES

- Figure 1: Global: Advanced Ceramics Market: Major Drivers and Challenges
- Figure 2: Global: Advanced Ceramics Market: Sales Value (in Billion US\$), 2018-2023
- Figure 3: Global: Advanced Ceramics Market Forecast: Sales Value (in Billion US\$), 2024-2032
- Figure 4: Global: Advanced Ceramics Market: Breakup by Material Type (in %), 2023
- Figure 5: Global: Advanced Ceramics Market: Breakup by Class Type (in %), 2023
- Figure 6: Global: Advanced Ceramics Market: Breakup by End Use Industry (in %), 2023
- Figure 7: Global: Advanced Ceramics Market: Breakup by Region (in %), 2023
- Figure 8: Global: Advanced Ceramics (Alumina) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 9: Global: Advanced Ceramics (Alumina) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 10: Global: Advanced Ceramics (Titanate) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 11: Global: Advanced Ceramics (Titanate) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 12: Global: Advanced Ceramics (Zirconia) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 13: Global: Advanced Ceramics (Zirconia) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 14: Global: Advanced Ceramics (Silicon Carbide) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 15: Global: Advanced Ceramics (Silicon Carbide) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 16: Global: Advanced Ceramics (Other Material Types) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 17: Global: Advanced Ceramics (Other Material Types) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 18: Global: Advanced Ceramics (Monolithic Ceramics) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 19: Global: Advanced Ceramics (Monolithic Ceramics) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 20: Global: Advanced Ceramics (Ceramic Coatings) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 21: Global: Advanced Ceramics (Ceramic Coatings) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 22: Global: Advanced Ceramics (Ceramic Matrix Composites) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 23: Global: Advanced Ceramics (Ceramic Matrix Composites) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 24: Global: Advanced Ceramics (Other Class Types) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 25: Global: Advanced Ceramics (Other Class Types) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 26: Global: Advanced Ceramics (Electrical and Electronics) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 27: Global: Advanced Ceramics (Electrical and Electronics) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 28: Global: Advanced Ceramics (Medical) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 29: Global: Advanced Ceramics (Medical) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 30: Global: Advanced Ceramics (Transportation) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 31: Global: Advanced Ceramics (Transportation) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 32: Global: Advanced Ceramics (Defense and Security) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 33: Global: Advanced Ceramics (Defense and Security) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 34: Global: Advanced Ceramics (Chemical) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 35: Global: Advanced Ceramics (Chemical) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 36: Global: Advanced Ceramics (Other End Use Industries) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 37: Global: Advanced Ceramics (Other End Use Industries) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 38: North America: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 39: North America: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 40: United States: Advanced Ceramics Market: Sales Value (in Million US\$),

2018 & 2023

Figure 41: United States: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 42: Canada: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 43: Canada: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 44: Asia-Pacific: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 45: Asia-Pacific: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 46: China: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 47: China: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 48: Japan: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 49: Japan: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 50: India: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 51: India: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 52: South Korea: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 53: South Korea: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 54: Australia: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 55: Australia: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 56: Indonesia: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 57: Indonesia: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 58: Others: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 59: Others: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 60: Europe: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 &

2023

Figure 61: Europe: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 62: Germany: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 63: Germany: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 64: France: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 65: France: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 66: United Kingdom: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 67: United Kingdom: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 68: Italy: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 69: Italy: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 70: Spain: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 71: Spain: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 72: Russia: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 73: Russia: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 74: Others: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 75: Others: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 76: Latin America: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 77: Latin America: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 78: Brazil: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 79: Brazil: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 80: Mexico: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 &

2023

Figure 81: Mexico: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 82: Others: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 83: Others: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 84: Middle East and Africa: Advanced Ceramics Market: Sales Value (in Million US\$), 2018 & 2023

Figure 85: Middle East and Africa: Advanced Ceramics Market: Breakup by Country (in %), 2023

Figure 86: Middle East and Africa: Advanced Ceramics Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 87: Global: Advanced Ceramics Industry: SWOT Analysis

Figure 88: Global: Advanced Ceramics Industry: Value Chain Analysis

Figure 89: Global: Advanced Ceramics Industry: Porter's Five Forces Analysis

I would like to order

Product name: Advanced Ceramics Market Report by Material Type (Alumina, Titanate, Zirconia, Silicon Carbide, and Others), Class Type (Monolithic Ceramics, Ceramic Coatings, Ceramic Matrix Composites, and Others), End Use Industry (Electrical and Electronics, Medical, Transportation, Defense and Security, Chemical, and Others), and Region 2024-2032

Product link: <https://marketpublishers.com/r/A474B78E6871EN.html>

Price: US\$ 3,899.00 (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/A474B78E6871EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970