

# Thermal Ceramics Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2022-2027

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## Abstracts

The global thermal ceramics market reached a value of US\$ 4.3 Billion in 2021. Looking forward, IMARC Group expects the market to reach US\$ 5.7 Billion by 2027, exhibiting at a CAGR of 4.7% during 2022-2027. Keeping in mind the uncertainties of COVID-19, we are continuously tracking and evaluating the direct as well as the indirect influence of the pandemic on different end use industries. These insights are included in the report as a major market contributor.

Thermal ceramics, also known as ultra-high temperature ceramics (UHTCs), are refractory materials that provide durability at over 2000 degrees Celsius. They are used to reduce energy consumption, emissions, and operating costs in high-temperature industrial processing of metals, cement, ceramics, glass, and petrochemicals. Their refractory quality and electrical conductivity make them ideal for managing molten aluminum. Besides this, as they can refract thermal energy and resist corrosion, thermal ceramics are gaining widespread adoption for insulation of nuclear water systems across the globe.

Thermal Ceramics Market Trends:

Due to their high-temperature resistance, thermal ceramics are extensively utilized in the aerospace industry to meet stringent performance, temperature, and weight specifications of spacecraft. This, in confluence with the increasing funding by governments of various countries in space exploration, represents one of the key factors bolstering the market growth. Moreover, the escalating use of hypersonic missiles and weapons on account of the rising geopolitical tensions and investments in the defense sector is influencing the market positively. Apart from this, thermal ceramics are employed in the automotive industry to protect the surface and inner layer of

vehicles from friction and generated plasma. This, along with the boosting sales of passenger vehicles on account of rapid urbanization and inflating income levels, is contributing to market growth. It can also be attributed to the expanding application of off-the-road vehicles in the construction industry. Furthermore, thermal ceramics provide lightweight fire insulation in cruise ships, super-yachts, high-speed ferries, offshore platforms, and floating production storage and offloading (FPSO) vessels. Therefore, the emerging need for energy and the declining onshore oil exploration activities are propelling their use in deep-water oil extraction, especially in remote locations.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global thermal ceramics market, along with forecasts at the global, regional and country level from 2022-2027. Our report has categorized the market based on type, temperature range and end use industry.

#### Breakup by Type:

- Ceramic Fabrics
- Insulation Bricks

#### Breakup by Temperature Range:

- 650-1000 Celsius
- 1000-1400 Celsius
- 1400-1600 Celsius
- Above 1600 Celsius

#### Breakup by End Use Industry:

- Mining and Metal Processing
- Chemicals and Petrochemicals
- Construction
- Manufacturing
- Power Generation
- Aerospace
- 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, CeramTec GmbH, Dyson Technical Ceramics Ltd., FibreCast Inc., Ibiden Co. Ltd., Mitsubishi Chemical Holdings Corporation, Morgan Advanced Materials, Rath Group, Rauschert GmbH, RHI Magnesita GmbH, Shinagawa Refractories Co. Ltd., Unifrax and YESO Insulating Products Co. Ltd. Key Questions Answered in This Report:

How has the global thermal ceramics market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global thermal ceramics market?

What are the key regional markets?

What is the breakup of the market based on the type?

What is the breakup of the market based on the temperature range?

What is the breakup of the market based on the end use industry?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global thermal ceramics market and who are the key players?

What is the degree of competition in the industry?

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