

Aluminum Oxide Market Report by Form Type (Nanoparticles, Powder, Pellets, Tablets, Sputtering Targets), Application (Aluminum Smelting, Abrasive, Aluminum Chemicals, Engineered Ceramics, Refractories), End User (Medical, Automotive, Industrial Manufacturing, Electronics, and Others), and Region 2024-2032

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Report description:

The global aluminum oxide market size reached US\$ 6.0 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 9.2 Billion by 2032, exhibiting a growth rate (CAGR) of 4.8% during 2024-2032.

Also known as alumina, aluminum oxide (Al_2O_3) is a white, odorless chemical compound commonly found in different forms, such as powder, pellets, tablets, pieces, nanoparticles and sputtering targets. It is widely used as an electric insulator, abrasive and a protective layer in industrial manufacturing processes to prevent devices from weathering. It also finds applications in chromatography and making ceramic materials around the world on account of its high thermal conductivity.

Aluminum Oxide Market Trends:

The threat to flora, fauna and human life is increasing across the globe on account of the perpetually rising environmental pollutants. As a result, there is a rise in the demand for Al_2O_3 to remove toxic pollutants effectively. This can also be accredited to its affordability, high surface area, adsorption ability, surface acidity and thermal stability. In addition, due to its bio-inertness and chemical properties, Al_2O_3 acts as a preferred material in bearings of hip replacements, bionic implants, prosthetic eye substitutes, tissue reinforcements, dental crowns, abutments, bridges, and other dental implants. It is also utilized in lab equipment and tools, such as crucibles and furnaces, worldwide. This, coupled with the growing investments in the healthcare sector by governing agencies of numerous countries, is driving the market. Moreover, the high melting and boiling points and the excellent thermal resistive properties are augmenting the sales of this metal oxide to manufacture high-temperature furnace insulations and electrical insulators. Besides this, the expanding application of Al_2O_3 in the construction, container packaging,

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electrical engineering and smelting process is strengthening the growth of the market. Furthermore, key industry players are collaborating and forming alliances to focus on commercialization and large-scale production, which is projected to fuel the market growth.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global aluminum oxide market report, along with forecasts at the global, regional and country level from 2024-2032. Our report has categorized the market based on form type, application and end user.

Breakup by Form Type:

- Nanoparticles
- Powder
- Pellets
- Tablets
- Sputtering Targets

Breakup by Application:

- Aluminum Smelting
- Abrasive
- Aluminum Chemicals
- Engineered Ceramics
- Refractories

Breakup by End User:

- Medical
- Automotive
- Industrial Manufacturing
- Electronics
- Others

Breakup by Region:

- North America
- United States
- Canada
- Asia-Pacific
- China
- Japan
- India
- South Korea
- Australia
- Indonesia
- Others
- Europe
- Germany

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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 Alcoa Corporation, Aluminum Corporation of China Limited, BASF SE, Cabot Corporation, Evonik Industries AG, Hangzhou Jinjiang Group Co. Ltd., Honeywell International Inc., J.M. Huber Corporation, Merck KGaA, United Company Rusal Plc, Sasol Limited, Sumitomo Chemical Co. Ltd. and W.R. Grace & Co.

Key Questions Answered in This Report

1. What was the size of the global aluminum oxide market in 2023?
2. What is the expected growth rate of the global aluminum oxide market during 2024-2032?
3. What are the key factors driving the global aluminum oxide market?
4. What has been the impact of COVID-19 on the global aluminum oxide market?
5. What is the breakup of the global aluminum oxide market based on the form type?
6. What is the breakup of the global aluminum oxide market based on the application?
7. What are the key regions in the global aluminum oxide market?
8. Who are the key players/companies in the global aluminum oxide market?

Table of 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 Aluminum Oxide Market
 - 5.1 Market Overview

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- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast
- 6 Market Breakup by Form Type
 - 6.1 Nanoparticles
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
 - 6.2 Powder
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast
 - 6.3 Pellets
 - 6.3.1 Market Trends
 - 6.3.2 Market Forecast
 - 6.4 Tablets
 - 6.4.1 Market Trends
 - 6.4.2 Market Forecast
 - 6.5 Sputtering Targets
 - 6.5.1 Market Trends
 - 6.5.2 Market Forecast
- 7 Market Breakup by Application
 - 7.1 Aluminum Smelting
 - 7.1.1 Market Trends
 - 7.1.2 Market Forecast
 - 7.2 Abrasive
 - 7.2.1 Market Trends
 - 7.2.2 Market Forecast
 - 7.3 Aluminum Chemicals
 - 7.3.1 Market Trends
 - 7.3.2 Market Forecast
 - 7.4 Engineered Ceramics
 - 7.4.1 Market Trends
 - 7.4.2 Market Forecast
 - 7.5 Refractories
 - 7.5.1 Market Trends
 - 7.5.2 Market Forecast
- 8 Market Breakup by End User
 - 8.1 Medical
 - 8.1.1 Market Trends
 - 8.1.2 Market Forecast
 - 8.2 Automotive
 - 8.2.1 Market Trends
 - 8.2.2 Market Forecast
 - 8.3 Industrial Manufacturing
 - 8.3.1 Market Trends
 - 8.3.2 Market Forecast
 - 8.4 Electronics
 - 8.4.1 Market Trends

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- 8.4.2 Market Forecast
- 8.5 Others
 - 8.5.1 Market Trends
 - 8.5.2 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

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- 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 Alcoa Corporation
 - 14.3.1.1 Company Overview
 - 14.3.1.2 Product Portfolio
 - 14.3.1.3 Financials
 - 14.3.1.4 SWOT Analysis

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14.3.2 Aluminum Corporation of China Limited

14.3.2.1 Company Overview

14.3.2.2 Product Portfolio

14.3.2.3 Financials

14.3.3 BASF SE

14.3.3.1 Company Overview

14.3.3.2 Product Portfolio

14.3.3.3 Financials

14.3.3.4 SWOT Analysis

14.3.4 Cabot Corporation

14.3.4.1 Company Overview

14.3.4.2 Product Portfolio

14.3.4.3 Financials

14.3.4.4 SWOT Analysis

14.3.5 Evonik Industries AG

14.3.5.1 Company Overview

14.3.5.2 Product Portfolio

14.3.5.3 SWOT Analysis

14.3.6 Hangzhou Jinjiang Group Co. Ltd.

14.3.6.1 Company Overview

14.3.6.2 Product Portfolio

14.3.7 Honeywell International Inc.

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 J.M. Huber Corporation

14.3.8.1 Company Overview

14.3.8.2 Product Portfolio

14.3.8.3 SWOT Analysis

14.3.9 Merck KGaA

14.3.9.1 Company Overview

14.3.9.2 Product Portfolio

14.3.9.3 Financials

14.3.9.4 SWOT Analysis

14.3.10 United Company Rusal Plc

14.3.10.1 Company Overview

14.3.10.2 Product Portfolio

14.3.11 Sasol Limited

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 Sumitomo Chemical Co. Ltd.

14.3.12.1 Company Overview

14.3.12.2 Product Portfolio

14.3.12.3 Financials

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- 14.3.12.4 SWOT Analysis
- 14.3.13 W.R. Grace & Co.
 - 14.3.13.1 Company Overview
 - 14.3.13.2 Product Portfolio
 - 14.3.13.3 SWOT Analysis

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