

High Purity Alumina Market Report by Purity Level (4N, 5N, 6N), Production Method (Hydrolysis of Aluminium Alkoxide, Hydrochloric Acid Leaching, and Others), Application (LED, Semiconductor Substrate, Phosphor, Sapphire Glass, and Others), and Region 2024-2032

Market Report | 2024-08-10 | 144 pages | IMARC Group

AVAILABLE LICENSES:

- Electronic (PDF) Single User \$3999.00
- Five User Licence \$4999.00
- Enterprisewide License \$5999.00

Report description:

The global high purity alumina market size reached US\$ 2.1 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 12.6 Billion by 2032, exhibiting a growth rate (CAGR) of 21.4% during 2024-2032.

High purity alumina (HPA), or aluminum oxide, refers to processed non-metallurgical alumina. It is usually manufactured through the hydrolysis of aluminum oxide, hydrochloric acid leaching, underwater spark discharge with aluminum and vapor-phase oxidation processes. It can be classified into 4N, 5N and 6N, depending upon the level of purity and exhibits a high melting point, corrosion resistance and thermal stability. As a result, HPA finds extensive applications in the manufacturing of artificial sapphire substrates, light-emitting diodes (LEDs), semiconductors, lithium-ion batteries, smart electronic devices, ceramics, photovoltaic cells and artificial gemstones.

Significant growth in the electronics industry represents one of the key factors creating a positive outlook for the market. HPA is used to fabricate semiconductors, which are further utilized in the assembly of personal computers, tablets, gaming consoles, televisions and servers. Furthermore, the increasing product demand for the manufacturing of LED lights is also contributing to the market growth. Due to rising environmental consciousness, there is a shift in the consumer preference from traditionally used incandescent bulbs towards energy-efficient LED variants. HPA is also used as a coating on lithium-ion (LI-ion) battery separators used in electronic vehicles (EVs) to optimize efficiency and minimize emissions into the environment. Additionally, various product innovations, such as the development of ready-to-use medical bio-ceramics for orthopedic and dental implants, are augmenting

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scott-international.com

www.scott-international.com

the market growth. Other factors, including the widespread utilization of HPA for the production of sapphire with minimal flaws in the crystal lattice, along with extensive research and development (R&D) activities, are anticipated to drive the market further.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global high purity alumina market report, along with forecasts at the global, regional and country level from 2024-2032. Our report has categorized the market based on purity level, production method and application.

Breakup by Purity Level:

- 4N
- 5N
- 6N

Breakup by Production Method:

- Hydrolysis of Aluminium Alkoxide
- Hydrochloric Acid Leaching
- Others

Breakup by Application:

- LED
- Semiconductor Substrate
- Phosphor
- Sapphire Glass
- Others

Breakup by Region:

- North America
 - o□United States
 - o□Canada
- Asia Pacific
 - o□China
 - o□Japan
 - o□India
 - o□South Korea
 - o□Australia
 - o□Indonesia
 - o□Others
- Europe
 - o□Germany
 - o□France
 - o□United Kingdom
 - o□Italy
 - o□Spain
 - o□Russia
 - o□Others
- Latin America
 - o□Brazil

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- o Mexico
- o Others
- Middle East and Africa

Competitive Landscape:

The report has also analysed the competitive landscape of the market with some of the key players being Alcoa Corporation, Altech Chemicals Limited, Baikowski SAS, Coorstek Inc. (Keystone Holdings LLC), Nippon Light Metal Holdings Company Ltd., Norsk Hydro ASA, RusAL, Sasol Limited, Sumitomo Chemical Co. Ltd and Zibo Honghe Chemical Co. Ltd.

Key Questions Answered in This Report:

- How has the global high purity alumina market performed so far and how will it perform in the coming years?
- What has been the impact of COVID-19 on the global high purity alumina market?
- What are the key regional markets?
- What is the breakup of the market based on the purity level?
- What is the breakup of the market based on the production method?
- What is the breakup of the market based on the application?
- 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 high purity alumina market and who are the key players?
- What is the degree of competition in the industry?

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 High Purity Alumina Market
 - 5.1 Market Overview
 - 5.2 Market Performance
 - 5.3 Impact of COVID-19
 - 5.4 Market Forecast
- 6 Market Breakup by Purity Level
 - 6.1 4N
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.2 5N
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast
- 6.3 6N
 - 6.3.1 Market Trends
 - 6.3.2 Market Forecast
- 7 Market Breakup by Production Method
 - 7.1 Hydrolysis of Aluminium Alkoxide
 - 7.1.1 Market Trends
 - 7.1.2 Market Forecast
 - 7.2 Hydrochloric Acid Leaching
 - 7.2.1 Market Trends
 - 7.2.2 Market Forecast
 - 7.3 Others
 - 7.3.1 Market Trends
 - 7.3.2 Market Forecast
- 8 Market Breakup by Application
 - 8.1 LED
 - 8.1.1 Market Trends
 - 8.1.2 Market Forecast
 - 8.2 Semiconductor Substrate
 - 8.2.1 Market Trends
 - 8.2.2 Market Forecast
 - 8.3 Phosphor
 - 8.3.1 Market Trends
 - 8.3.2 Market Forecast
 - 8.4 Sapphire Glass
 - 8.4.1 Market Trends
 - 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

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 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

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 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
 - 14.3.2 Altech Chemicals Limited
 - 14.3.2.1 Company Overview
 - 14.3.2.2 Product Portfolio
 - 14.3.2.3 Financials
 - 14.3.3 Baikowski SAS
 - 14.3.3.1 Company Overview
 - 14.3.3.2 Product Portfolio
 - 14.3.3.3 Financials
 - 14.3.4 Coorstek Inc. (Keystone Holdings LLC)
 - 14.3.4.1 Company Overview
 - 14.3.4.2 Product Portfolio
 - 14.3.5 Nippon Light Metal Holdings Company Ltd.
 - 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 Norsk Hydro ASA
 - 14.3.6.1 Company Overview
 - 14.3.6.2 Product Portfolio

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 14.3.6.3 Financials
- 14.3.6.4 SWOT Analysis
- 14.3.7 RusAL
 - 14.3.7.1 Company Overview
 - 14.3.7.2 Product Portfolio
- 14.3.8 Sasol Limited
 - 14.3.8.1 Company Overview
 - 14.3.8.2 Product Portfolio
 - 14.3.8.3 Financials
 - 14.3.8.4 SWOT Analysis
- 14.3.9 Sumitomo Chemical Co. Ltd.
 - 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 Zibo Honghe Chemical Co. Ltd.
 - 14.3.10.1 Company Overview
 - 14.3.10.2 Product Portfolio

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

High Purity Alumina Market Report by Purity Level (4N, 5N, 6N), Production Method (Hydrolysis of Aluminium Alkoxide, Hydrochloric Acid Leaching, and Others), Application (LED, Semiconductor Substrate, Phosphor, Sapphire Glass, and Others), and Region 2024-2032

Market Report | 2024-08-10 | 144 pages | IMARC Group

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Electronic (PDF) Single User	\$3999.00
	Five User Licence	\$4999.00
	Enterprisewide License	\$5999.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Date

2026-03-02

Signature

A large, empty rectangular box intended for a signature.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com