

# **High Purity Alumina Market By Purity Level (4N, 5N, 6N); By Technology (Hydrolysis and HCL Based); By Application (LED, Semiconductors, Phosphorus, Electronic Display, Sapphire and Others); and Region – Global Analysis of Market Size, Share & Trends for 2019 – 2020 and Forecasts to 2030**

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## **Abstracts**

### Product Overview

High purity alumina (HPA) is a high-value, white, granular chemical product manufactured by treating aluminum with certain chemicals or by use of another aluminous feedstock. High purity alumina is a pure form of aluminum oxide (Al<sub>2</sub>O<sub>3</sub>) characterized by purity levels ranging approximately 99.99%. Alkoxide process, thermal decomposition process, choline hydrolysis process, and modified Bayer process are some of the commonly used processes for high purity alumina. High purity alumina possesses properties including high brightness, corrosion resistance, and endurance against high temperatures. High purity alumina is used to produce sapphire substrate in applications such as LED lights and artificial sapphire glass. As there is no substitute for HPA in the manufacture of synthetic sapphire, it is a critical and highly demanded product. HPA is widely used as a coating on the separator sheets in lithium-ion batteries.

### Market Highlights

Global High Purity Alumina Market is expected to project a notable CAGR of 21.70% in 2030.

Global High Purity Alumina Market to surpass USD 11.2 billion by 2030 from USD 1.57 billion in 2020 at a CAGR of 21.70% in the coming years, i.e., 2021-30. Global High Purity Alumina market is estimated to grow due to booming LED lights and synthetic

sapphire demand, an upsurge in the production of electric vehicles, and recent developments in the automotive industry. Furthermore, the new potential application of aluminum as a substitute for copper in the power industry and many other trends is likely to propel the high purity alumina (HPA) market growth.

#### Recent Highlights in Global High Purity Alumina Market

In March 2017, Pure alumina, an Australia-based premier supplier of High Purity Alumina announced its acquisition with Polar Sapphire. This will benefit pure alumina to start commercial production of HPA, widened its product portfolio, and bring technology advancement.

In June 2017, Quantum resources limited, a U.S.-based company focus on energy value chain recently announced its acquisition with Halcyon Resources Pty Ltd., an Australia-based major player in high purity alumina and high purity silica. This will benefit Quantum in technology advancement, pursue new energy metal focus and broaden product portfolio to enable better services.

#### Global High Purity Alumina Market: Segments

LED segment to grow with the highest CAGR during 2021-30

Global High Purity Alumina Market is segmented by application into LED, semiconductors, phosphorus, electronic display, sapphire, and others. The LED segment held the largest market share of XX.X% in the year 2020. LED lightings are durable and have a long lifespan which is increasing their adoption rate among consumers or various end-user industries. This growing usage of LED is estimated to boost the market in the coming years.

4N Segment to grow with the highest CAGR during 2021-30

Global High Purity Alumina market is distributed by Purity Level into 4N, 5N, and 6N. 4N Segment held the largest market share of XX.X% in the year 2020. 4N high purity alumina is used in gas separation and ultra-filtration process owing to high chemical resistance, porous nature, and mechanical strength. They also find applications in smartphones and portable tablet devices.

#### Market Dynamics

##### Drivers

##### Increasing Demand for LED Over Conventional Bulbs

High purity alumina is widely used in the production of synthetic sapphire that is used as a substrate in LED preparation. Sapphire is the preferred ingredient in the manufacturing of LED, as it was much cheaper than other substrates, such as Silicon

Carbide, and Gallium Nitride. The demand for LEDs is increasing rapidly owing to properties such as high efficiency, better brightness, and less electric consumption. Furthermore, increasing environmental awareness of the public and growing demand for smart illumination are expected to boost the demand for high purity alumina in the coming years.

#### Growing demand for electric vehicles (EVs)

The demand for electric vehicles (EVs) is increasing in developing economies to limit carbon emission and to reduce dependency on the fossil fuels such as diesel and petrol. This, in turn, has surged the demand for lithium-ion batteries which is expected to boost the consumption of high purity alumina as it is used for coating the lithium-ion battery separators.

#### Restraint

##### High Production cost

High purity alumina requires high production costs due to which the cost of end products is high and profitability is low. The higher cost of production in some of the end-use segments is estimated to hamper the market growth in the coming years.

#### Global High Purity Alumina Market: Key Players

Alcoa Inc

Company Overview, Business Strategy, Key Product Offerings, Financial Performance, Key Performance Indicators, Risk Analysis, Recent Development, Regional Presence, and SWOT Analysis.

Sumitomo Chemical Co., Ltd,

Nippon Light Metal Holdings Co., Ltd,

Sasol Limited,

Xuancheng Jingrui New Materials Co., Ltd,

Altech Chemicals,

Hebei Pengda Advanced Materials Technology,

PSB Industries SA.

Orbite Technologies Inc

Norsk Hydro Asa

Other Prominent Players

#### Global High Purity Alumina Market: Regions

Global High Purity Alumina market is segmented based on regional analysis into five major regions. These include North America, Latin America, Europe, Asia Pacific, and

Middle East, and Africa.

Global High Purity Alumina market in Asia Pacific held the largest market share of XX.X% in the year 2020. Asia Pacific will continue to dominate the global high purity alumina market due to increasing usage of LED-based lighting and increasing application in Li-ion batteries. The presence of a large number of key manufacturers, availability of raw materials, labor at economic price is projected to witness a growth of the market in the region.

Global High Purity Alumina market is further segmented by region into:

North America Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – United States and Canada

Latin America Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – Mexico, Argentina, Brazil, and Rest of Latin America

Europe Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – United Kingdom, France, Germany, Italy, Spain, Belgium, Hungary, Luxembourg, Netherlands, Poland, NORDIC, Russia, Turkey, and Rest of Europe

APAC Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – India, China, South Korea, Japan, Malaysia, Indonesia, New Zealand, Australia, and Rest of APAC

MENA Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – North Africa, Israel, GCC, South Africa, and Rest of MENA

Global High Purity Alumina market report also contains analysis on:

High Purity Alumina Market Segments:

By Purity Level

4M

5M

6M

By Technology

Hydrolysis

HCL Based

By Application

LED

Semiconductors

Phosphorus

Electronic Display

Sapphire

Others

Global High Purity Alumina market Dynamics

Global High Purity Alumina market size  
Supply & Demand  
Current Trends/Issues/Challenges  
Competition & Companies Involved in the Market  
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**11. OTHER PROMINENT PLAYERS**

Consultant Recommendation

\*\*The above-given segmentations and companies could be subjected to further modification based on in-depth feasibility studies conducted for the final deliverable.

## I would like to order

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