

# Global High Purity Black Phosphorus Crystal Market Growth 2022-2028

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# **Abstracts**

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Black phosphorus (BP) is an allotrope of phosphorus consisting of multiple layers with two-dimensional structures, weakly bonded to one another by van der Waals forces. When separated, the resulting monolayer (or few-layer) material is known as phosphorene.

The global market for High Purity Black Phosphorus Crystal is estimated to increase from US\$ million in 2021 to reach US\$ million by 2028, exhibiting a CAGR of % during 2022-2028. Keeping in mind the uncertainties of COVID-19 and Russia-Ukraine War, we are continuously tracking and evaluating the direct as well as the indirect influence of the pandemic on different end use sectors. These insights are included in the report as a major market contributor.

The APAC High Purity Black Phosphorus Crystal market is expected at value of US\$ million in 2022 and grow at approximately % CAGR during 2022 and 2028.

The United States High Purity Black Phosphorus Crystal market is expected at value of US\$ million in 2022 and grow at approximately % CAGR during 2022 and 2028.

The Europe High Purity Black Phosphorus Crystal market is expected at value of US\$ million in 2022 and grow at approximately % CAGR during 2022 and 2028.

The China High Purity Black Phosphorus Crystal market is expected at value of US\$ million in 2022 and grow at approximately % CAGR during 2022 and 2028.



Global key High Purity Black Phosphorus Crystal players cover ACS Material, 2D Semiconductors, Nanochemazone, American Elements and Merck, etc. In terms of revenue, the global largest two companies occupy a share nearly % in 2021.

Report Coverage

This latest report provides a deep insight into the global High Purity Black Phosphorus Crystal market covering all its essential aspects. This ranges from a macro overview of the market to micro details of the market size, competitive landscape, development trend, niche market, key market drivers and challenges, value chain analysis, etc.

This report aims to provide a comprehensive picture of the global High Purity Black Phosphorus Crystal market, with both quantitative and qualitative data, to help readers understand how the High Purity Black Phosphorus Crystal market scenario changed across the globe during the pandemic and Russia-Ukraine War.

The base year considered for analyses is 2021, while the market estimates and forecasts are given from 2022 to 2028. The market estimates are provided in terms of revenue in USD millions and volume in Tons.

Market Segmentation:

The study segments the High Purity Black Phosphorus Crystal market and forecasts the market size by Type (Orthorhombic Crystal and Rhombohedral Crystal,), by Application (Electronic Devices, Energy Storage, Sensors and Others), and region (APAC, Americas, Europe, and Middle East & Africa).

Segmentation by type

Orthorhombic Crystal

Rhombohedral Crystal

Segmentation by application

**Electronic Devices** 

**Energy Storage** 



Sensors

Others

#### Segmentation by region

Americas

United States

Canada

Mexico

Brazil

APAC

China

#### Japan

Korea

Southeast Asia

India

Australia

Europe

Germany

France

UK



Italy

Russia

Middle East & Africa

Egypt

South Africa

Israel

Turkey

GCC Countries

Major companies covered

**ACS Material** 

2D Semiconductors

Nanochemazone

American Elements

Merck

HQ Graphene

Hunan Azeal Materials

Ossila Ltd.

Stanford Advanced Materials

Manchester Nanomaterials



Sigma-Aldrich

WEISTRON

Smart-elements

Taizhou Sunano Energy

Nanjing XFNANO Materials

Chapter Introduction

Chapter 1: Scope of High Purity Black Phosphorus Crystal, Research Methodology, etc.

Chapter 2: Executive Summary, global High Purity Black Phosphorus Crystal market size (sales and revenue) and CAGR, High Purity Black Phosphorus Crystal market size by region, by type, by application, historical data from 2017 to 2022, and forecast to 2028.

Chapter 3: High Purity Black Phosphorus Crystal sales, revenue, average price, global market share, and industry ranking by company, 2017-2022

Chapter 4: Global High Purity Black Phosphorus Crystal sales and revenue by region and by country. Country specific data and market value analysis for the U.S., Canada, Europe, China, Japan, South Korea, Southeast Asia, India, Latin America and Middle East & Africa.

Chapter 5, 6, 7, 8: Americas, APAC, Europe, Middle East & Africa, sales segment by country, by type, and type.

Chapter 9: Analysis of the current market trends, market forecast, opportunities and economic trends that are affecting the future marketplace

Chapter 10: Manufacturing cost structure analysis

Chapter 11: Sales channel, distributors, and customers



Chapter 12: Global High Purity Black Phosphorus Crystal market size forecast by region, by country, by type, and application.

Chapter 13: Comprehensive company profiles of the leading players, including ACS Material, 2D Semiconductors, Nanochemazone, American Elements, Merck, HQ Graphene, Hunan Azeal Materials, Ossila Ltd. and Stanford Advanced Materials, etc.

Chapter 14: Research Findings and Conclusion



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