

Global Arsenic Triphosphide Market Growth 2026-2032

<https://marketpublishers.com/r/GE4D22518666EN.html>

Date: July 2026

Pages: 102

Price: US\$ 3,660.00 (Single User License)

ID: GE4D22518666EN

Abstracts

The global Arsenic Triphosphide market size is predicted to grow from US\$ 77.28 million in 2025 to US\$ 111 million in 2032; it is expected to grow at a CAGR of 5.4% from 2026 to 2032.

Arsenic Triphosphide (AsP₃) is a niche III-V type arsenic-phosphorus compound (often treated as an arsenic phosphide derivative rather than a widely commercialized bulk chemical) used mainly in advanced semiconductor research, infrared materials, and specialty electronic or optoelectronic applications due to its tunable bandgap and electronic properties. The supply chain is upstream-heavy and highly controlled: it begins with high-purity arsenic (derived from copper/lead smelting byproducts) and phosphorus (typically from phosphate rock via thermal or wet-process routes), both requiring ultra-high purification (5N-7N grade) for electronic use; midstream synthesis involves solid-state reaction or vapor-phase techniques (e.g., chemical vapor transport, Bridgman growth, or sealed ampoule synthesis under inert/vacuum conditions) carried out by specialized semiconductor material producers or research-grade chemical manufacturers; downstream, the material is supplied in small volumes as crystals, powders, or thin-film precursors to research labs, defense-related optoelectronics, infrared detector developers, and niche semiconductor R&D teams. Due to toxicity (arsenic) and handling risks (phosphorus), the entire chain is tightly regulated, with logistics, storage, and export subject to hazardous material and dual-use controls, resulting in a supply structure dominated by a few high-purity material specialists rather than large-scale commodity chemical producers. In 2025, global Arsenic Triphosphide output was about 4,500 tons with 6,000 tons of capacity, average prices of USD 15,000-30,000 per ton, and gross margins around 33%.

United States market for Arsenic Triphosphide is estimated to increase from US\$ million

in 2025 to US\$ million by 2032, at a CAGR of % from 2026 through 2032.

China market for Arsenic Triphosphide is estimated to increase from US\$ million in 2025 to US\$ million by 2032, at a CAGR of % from 2026 through 2032.

Europe market for Arsenic Triphosphide is estimated to increase from US\$ million in 2025 to US\$ million by 2032, at a CAGR of % from 2026 through 2032.

Global key Arsenic Triphosphide players cover American Elements (USA), Amorphous Materials (USA), 5N Plus (Canada), SCHOTT (Germany), Umicore (Belgium), etc. In terms of revenue, the global two largest companies occupied for a share nearly % in 2025.

LP Information, Inc. (LPI) ' newest research report, the "Arsenic Triphosphide Industry Forecast" looks at past sales and reviews total world Arsenic Triphosphide sales in 2025, providing a comprehensive analysis by region and market sector of projected Arsenic Triphosphide sales for 2026 through 2032. With Arsenic Triphosphide sales broken down by region, market sector and sub-sector, this report provides a detailed analysis in US\$ millions of the world Arsenic Triphosphide industry.

This Insight Report provides a comprehensive analysis of the global Arsenic Triphosphide landscape and highlights key trends related to product segmentation, company formation, revenue, and market share, latest development, and M&A activity. This report also analyzes the strategies of leading global companies with a focus on Arsenic Triphosphide portfolios and capabilities, market entry strategies, market positions, and geographic footprints, to better understand these firms' unique position in an accelerating global Arsenic Triphosphide market.

This Insight Report evaluates the key market trends, drivers, and affecting factors shaping the global outlook for Arsenic Triphosphide and breaks down the forecast by Type, by Application, geography, and market size to highlight emerging pockets of opportunity. With a transparent methodology based on hundreds of bottom-up qualitative and quantitative market inputs, this study forecast offers a highly nuanced view of the current state and future trajectory in the global Arsenic Triphosphide.

This report presents a comprehensive overview, market shares, and growth opportunities of Arsenic Triphosphide market by product type, application, key manufacturers and key regions and countries.

Segmentation by Type:

Amorphous AsP?

Crystalline AsP?

Segmentation by Particle Size:

Coarse Particle (>100 μ m)

Fine Powder (1-100 μ m)

Nanopowder (

Contents

1 SCOPE OF THE REPORT

- 1.1 Market Introduction
- 1.2 Years Considered
- 1.3 Research Objectives
- 1.4 Market Research Methodology
- 1.5 Research Process and Data Source
- 1.6 Economic Indicators
- 1.7 Currency Considered
- 1.8 Market Estimation Caveats

2 EXECUTIVE SUMMARY

- 2.1 World Market Overview
 - 2.1.1 Global Arsenic Triphosphide Annual Sales 2021-2032
 - 2.1.2 World Current & Future Analysis for Arsenic Triphosphide by Geographic Region, 2021, 2025 & 2032
 - 2.1.3 World Current & Future Analysis for Arsenic Triphosphide by Country/Region, 2021, 2025 & 2032
- 2.2 Arsenic Triphosphide Segment by Type
 - 2.2.1 Amorphous AsP?
 - 2.2.2 Crystalline AsP?
 - 2.2.3 Arsenic Triphosphide Sales by Type
 - 2.2.3.1 Global Arsenic Triphosphide Sales Market Share by Type (2021-2026)
 - 2.2.3.2 Global Arsenic Triphosphide Revenue and Market Share by Type (2021-2026)
 - 2.2.3.3 Global Arsenic Triphosphide Sale Price by Type (2021-2026)
- 2.3 Arsenic Triphosphide Segment by Particle Size
 - 2.3.1 Coarse Particle (>100 ?m)
 - 2.3.2 Fine Powder (1?100 ?m)
 - 2.3.3 Nanopowder (

List Of Tables

LIST OF TABLES

Table 1. Arsenic Triphosphide Annual Sales CAGR by Geographic Region (2021, 2025 & 2032) & (\$ millions)

Table 2. Arsenic Triphosphide Annual Sales CAGR by Country/Region (2021, 2025 & 2032) & (\$ millions)

Table 3. Major Players of Amorphous AsP?

Table 4. Major Players of Crystalline AsP?

Table 5. Global Arsenic Triphosphide Sales by Type (2021-2026) & (Tons)

Table 6. Global Arsenic Triphosphide Sales Market Share by Type (2021-2026)

Table 7. Global Arsenic Triphosphide Revenue by Type (2021-2026) & (\$ million)

Table 8. Global Arsenic Triphosphide Revenue Market Share by Type (2021-2026)

Table 9. Global Arsenic Triphosphide Sale Price by Type (2021-2026) & (US\$/Ton)

Table 10. Major Players of Coarse Particle (>100 ?m)

Table 11. Major Players of Fine Powder (1?100 ?m)

Table 12. Major Players of Nanopowder (

List Of Figures

LIST OF FIGURES

Figure 1. Picture of Arsenic Triphosphide

Figure 2. Arsenic Triphosphide Report Years Considered

Figure 3. Research Objectives

Figure 4. Research Methodology

Figure 5. Research Process and Data Source

Figure 6. Global Arsenic Triphosphide Sales Growth Rate 2021-2032 (Tons)

Figure 7. Global Arsenic Triphosphide Revenue Growth Rate 2021-2032 (\$ millions)

Figure 8. Arsenic Triphosphide Sales by Geographic Region (2021, 2025 & 2032) & (\$ millions)

Figure 9. Arsenic Triphosphide Sales Market Share by Country/Region (2025)

Figure 10. Arsenic Triphosphide Sales Market Share by Country/Region (2021, 2025 & 2032)

Figure 11. Product Picture of Amorphous AsP?

Figure 12. Product Picture of Crystalline AsP?

Figure 13. Global Arsenic Triphosphide Sales Market Share by Type in 2026

Figure 14. Global Arsenic Triphosphide Revenue Market Share by Type (2021-2026)

Figure 15. Product Picture of Coarse Particle (>100 ?m)

Figure 16. Product Picture of Fine Powder (1?100 ?m)

Figure 17. Product Picture of Nanopowder (

I would like to order

Product name: Global Arsenic Triphosphide Market Growth 2026-2032

Product link: <https://marketpublishers.com/r/GE4D22518666EN.html>

Price: US\$ 3,660.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GE4D22518666EN.html>