

Phosphoramidite - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

Market Report | 2024-02-17 | 111 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The phosphoramidite market is expected to register a CAGR of 7.4% over the forecast period.

Key Highlights

- At the start of the COVID-19 pandemic, most businesses and research activities around the world ceased due to the increasing rate of infection from the SARS-CoV-2 virus, which reduced the use and demand of gene synthesizers like phosphoramidite in laboratories in the market. However, gene synthesizers played a crucial role in the research and development of the mRNA-based COVID-19 vaccine, which eventually increased the demand for phosphoramidite in the market. For example, in January 2022, the Food and Drug Administration provided a second approval to the mRNA-based COVID-19 vaccine from Moderna called Spikevax. Therefore, such developments increased the demand for phosphoramidite during the pandemic.
- The factors responsible for the growth of the phosphoramidite market include increasing synthetic nucleotide applications in therapeutics, growth in synthetic biology, and therapeutics for different chronic diseases. Also, governments of various nations have been providing research support for synthetic biology because of its extensive applications. For instance, in September 2022, the Government of New South Wales announced an investment of over USD 6 million into a new synthetic biology and biomanufacturing development program, which would improve access to manufacturing and production facilities and equipment across the State of Wales, Australia.
- Furthermore, increasing product launches and approvals are expected to increase the demand for phosphoramidite synthesis, propelling the market growth. For instance, in June 2021, DNA Script launched the Syntax platform with its Syntax System, an Enzymatic DNA Synthesis (EDS) technology-powered benchtop nucleic acid printer. The Syntax System comprises up to 60 nucleotides in length and delivers ready-for-use in d genomics workflows and molecular biology without additional handling. The system enables DNA oligos to be printed on-demand at record speed and without the delays or backorders that can occur with outsourced phosphoramidite synthesis services. Such instances are expected to propel the market's growth over the forecast

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

period.

-However, challenges in developing long nucleotide sequences are expected to hinder the market's growth.

Phosphoramidite Market Trends

DNA Phosphoramidites is Expected to Witness Growth Over the Forecast Period

- Phosphoramidites are standard chemical and a modified nucleosides used in modern DNA synthesis. These molecules allow the sequential addition of new bases to the DNA chain in an exquisitely simple and exceptionally efficient cyclic reaction.
- The increasing use of next-generation sequencing technology in several applications, such as biomarker discovery, oncology studies, and personalized medicine, is the key factor driving the market growth. For instance, the fast emergence of next-generation sequencing technology has revolutionized the field of genomics and medical diagnosis and has changed the traditional model of a gene-by-gene approach to syndrome-based panel sequencing, diagnostic exome sequencing (DES), and diagnostic genome sequencing (DGS), and precision model. According to the Centers for Disease Control and Prevention (CDC), in 2021, it is projected that more than 60 million people will have their genomes sequenced by 2025 worldwide as countries have taken the initiative to sequence large populations.
- Moreover, various companies are developing different ways to utilize phosphoramidite for oligonucleotide synthesis, which are expected to increase their adoption in the pharmaceutical and biotechnology industry, bolstering market growth. For instance, in June 2022, Amerigo Scientific launched extra large Drying Traps (up to 4 liters of acetonitrile solution) for research applications. These new DNA moisture traps can be used for maintaining moisture-free environments in oligonucleotide synthesis. These traps efficiently dry phosphoramidite solutions in acetonitrile, tetrazole solutions in acetonitrile (activator solutions), or dry acetonitrile (for preparing phosphoramidite solutions or activator solutions).

North America is Expected to Dominate the Market Over the Forecast Period

- The increasing number of investments by the government, advancements in research and development about NGS, and the growing prevalence of target diseases are expected to drive market growth in North America. The rising funding by research institutes, companies, and universities for next-generation sequencing is contributing to the growth of the market in the region. For instance, in August 2022, the Department of Health and Human Services announced funding for innovative research and study of structural birth defects with the use of human translational/clinical approaches (genomics, metabolomics, proteomics, etc.) and animal models.
- Moreover, the rising focus of companies on research and development activities, as well as the rising adoption of various business strategies such as product launches, partnerships, collaborations, and acquisitions, are also contributing to the market's growth. For instance, In May 2022, TriLink BioTechnologies announced a cooperative agreement with the Department of Defense and included funding for TriLink's expansion in San Diego, California, for nucleic acid production.
- Thus, the market is expected to witness significant growth over the forecast period due to the above-mentioned developments.

Phosphoramidite Industry Overview

The phosphoramidite market is moderately competitive and consists of several major players. In terms of market share, a few of the major players Thermo Fisher Scientific, Biosynth Carbosynth, TriLink BioTechnologies, Bioneer Corporation, Hongene Biotech Corporation and others, are currently dominating the industry.

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

1 INTRODUCTION

1.1 Study Assumptions and Market Definition

1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

4.1 Market Overview

4.2 Market Drivers

4.2.1 Increasing Synthetic Nucleotide Applications in Therapeutics

4.2.2 Growth in Synthetic Biology

4.3 Market Restraints

4.3.1 Challenges in Developing Long Nucleotide Sequences

4.4 Porter's Five Forces Analysis

4.4.1 Threat of New Entrants

4.4.2 Bargaining Power of Buyers/Consumers

4.4.3 Bargaining Power of Suppliers

4.4.4 Threat of Substitute Products

4.4.5 Intensity of Competitive Rivalry

5 MARKET SEGMENTATION (Market Size by Value - USD)

5.1 By Type

5.1.1 DNA Phosphoramidites

5.1.2 RNA Phosphoramidites

5.1.3 Other Phosphoramidites

5.2 By End-User

5.2.1 Pharmaceutical and Biotechnology Companies

5.2.2 Academic and Research Institutes

5.2.3 Other End-Users

5.3 Geography

5.3.1 North America

5.3.1.1 United States

5.3.1.2 Canada

5.3.1.3 Mexico

5.3.2 Europe

5.3.2.1 Germany

5.3.2.2 United Kingdom

5.3.2.3 France

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 5.3.2.4 Italy
- 5.3.2.5 Spain
- 5.3.2.6 Rest of Europe
- 5.3.3 Asia-Pacific
 - 5.3.3.1 China
 - 5.3.3.2 Japan
 - 5.3.3.3 India
 - 5.3.3.4 Australia
 - 5.3.3.5 South Korea
 - 5.3.3.6 Rest of Asia-Pacific
- 5.3.4 Rest of the World

6 COMPETITIVE LANDSCAPE

- 6.1 Company Profiles
 - 6.1.1 Thermo Fisher Scientific Inc.
 - 6.1.2 Biosynth Ltd
 - 6.1.3 TriLink BioTechnologies
 - 6.1.4 Bioneer Corporation
 - 6.1.5 Hongene Biotech Corporation
 - 6.1.6 Tokyo Chemical Industry Pvt. Ltd.
 - 6.1.7 Danaher Corporation
 - 6.1.8 Creative Biolabs, Inc.
 - 6.1.9 PolyOrg, Inc.
 - 6.1.10 Lumiprobe Corporation
 - 6.1.11 QIAGEN N.V.
 - 6.1.12 BOC Sciences

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Phosphoramidite - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

Market Report | 2024-02-17 | 111 pages | Mordor Intelligence

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
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		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*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-03-05
		Signature	

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com



Scotts International. EU Vat number: PL 6772247784

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