

Phycocyanin Market Forecasts to 2030 – Global Analysis By Form (Powder, Liquid and Gels), Source (Spirulina, Phormidium, Chlorella, Genetically Engineered Organisms and Other Sources), Distribution Channel, Application, End User and By Geography

<https://marketpublishers.com/r/P460C21AB34AEN.html>

Date: February 2025

Pages: 150

Price: US\$ 4,150.00 (Single User License)

ID: P460C21AB34AEN

Abstracts

According to Statistics MRC, the Global Phycocyanin Market is accounted for \$190.85 million in 2024 and is expected to reach \$316.57 million by 2030 growing at a CAGR of 8.8% during the forecast period. Phycocyanin is a blue pigment-protein complex found in cyanobacteria (blue-green algae) and some red algae. It is a type of phycobiliprotein, responsible for capturing light energy during photosynthesis. Phycocyanin absorbs light in the orange-red spectrum and reflects blue light, giving it its characteristic colour. It has antioxidant, anti-inflammatory, and immune-boosting properties, making it popular in dietary supplements and functional foods.

According to a Food and Drug Administration (FDA) report, Phycocyanin exhibits 70% antioxidant and anti-inflammatory properties in spirulina and it is widely consumed by more than 40% of the Japanese population as a dietary supplement.

Market Dynamics:

Driver:

Increasing vegan and plant-based diet trends

As consumers shift towards plant-based lifestyles, there is a growing demand for

natural, sustainable, and plant-derived ingredients, positioning phycocyanin as a desirable option. Derived from algae, phycocyanin meets the needs of health-conscious individuals seeking clean-label, vegan-friendly products. Its use as a natural food colorant, supplement, and cosmetic ingredient aligns well with the ethical and health values of plant-based diets. This trend enhances the appeal of phycocyanin in a wide range of products, driving market growth and adoption in the food sector.

Restraint:

Stability issues

Stability issues in phycocyanin arise due to its sensitivity to environmental factors like temperature, light, and pH. This makes it prone to degradation, colour fading, and loss of bioactivity, particularly in food, beverages, and cosmetics. The need for specialized storage conditions and shorter shelf life can increase production costs and limit its use in commercial applications. Consequently, these limitations reduce market growth potential, especially compared to more stable synthetic alternatives.

Opportunity:

Expansion of functional foods

Functional foods, which offer benefits beyond basic nutrition, often include natural antioxidants, immune support, and anti-inflammatory properties. Phycocyanin, derived from spirulina and other algae, fits perfectly within this trend due to its proven health benefits. As consumers seek clean-label, plant-based, and natural alternatives, phycocyanin is becoming a sought-after ingredient in functional foods like energy bars, smoothies, and supplements. Its inclusion in these products aligns with the growing focus on holistic health, thus driving further market growth for phycocyanin.

Threat:

Competition from synthetic alternatives

Synthetic colorants and additives are widely used in food, beverages, and cosmetics due to their cost-effectiveness and long shelf life. This makes it challenging for phycocyanin, which is derived from natural sources like algae, to compete on price and stability. Additionally, synthetic alternatives can be produced at a larger scale, creating supply chain advantages. As a result, manufacturers may prioritize synthetic options

over natural ingredients like phycocyanin, limiting its market share.

Covid-19 Impact

The covid-19 pandemic initially disrupted the phycocyanin market due to supply chain disruptions, labor shortages, and the closure of manufacturing facilities. However, the pandemic also increased consumer interest in immune-boosting products, driving demand for natural ingredients like phycocyanin in dietary supplements and functional foods. Additionally, the rising trend towards health-conscious and plant-based diets during the pandemic further contributed to market growth. As global conditions stabilize, the phycocyanin market is expected to recover and expand.

The spirulina segment is expected to be the largest during the forecast period

The spirulina segment is predicted to secure the largest market share throughout the forecast period. Phycocyanin from spirulina is a natural, blue pigment-protein complex extracted from the cyanobacterium *Arthrospira platensis*. Known for its antioxidant, anti-inflammatory, and immune-boosting properties, spirulina-derived phycocyanin is widely used in dietary supplements, functional foods, and cosmetics. It is considered a sustainable and eco-friendly alternative to synthetic colorants, making it popular in clean-label products.

The pharmaceuticals segment is expected to have the highest CAGR during the forecast period

The pharmaceuticals segment is anticipated to witness the highest CAGR during the forecast period due to its potent antioxidant, anti-inflammatory, and immune-modulating properties. It is used in formulations targeting oxidative stress, chronic inflammation, and immune system support. Phycocyanin's natural origin and therapeutic benefits make it a popular choice in alternative medicine and natural remedies. The increasing shift towards plant-based pharmaceuticals is fueling the demand for phycocyanin-based products.

Region with largest share:

Asia Pacific is expected to register the largest market share during the forecast period due to growing demand for health supplements, and plant-based products. Key players in the region are DIC Corporation, Cyanotech Corporation, Parry Nutraceuticals, and BASF SE. Countries like India and China, with strong algae cultivation practices, are

key contributors in Asia Pacific. The market in Asia-Pacific is expected to grow significantly, driven by health-conscious consumers and expanding application areas in food, pharmaceuticals, and personal care.

Region with highest CAGR:

North America is expected to witness the highest CAGR over the forecast period driven by the growing demand for natural food colorants, health supplements, and eco-friendly products. The region is home for many key players such as Cyanotech Corporation, DIC Corporation, Earthrise Nutritionals, and Algatechnologies Ltd. With rising health-consciousness and demand for plant-based ingredients, the phycocyanin market in North America is expected to experience robust growth.

Key players in the market

Some of the key players profiled in the Phycocyanin Market include DIC Corporation, Royal DSM N.V., BASF SE, FMC Corporation, Chr. Hansen Holding A/S, Sensient Technologies Corporation, Kemin Industries Inc., Parry Nutraceuticals, Japan Algae Corporation, Far East Bio-Tec Corporation, Valensa International, DDW The Color House, Phyco-Biotech Labs, SPIMACO Addwaeih, GNT Group B.V., Cyanotech Corporation and Bluetec Naturals Corporation.

Key Developments:

In June 2020, DIC Corporation introduced LINABLUE®, a natural blue food colorant derived from Spirulina algae, offering a vibrant blue hue for various food and beverage applications. This colorant is designed to provide an alternative to synthetic dyes and offers a safe and sustainable option for manufacturers.

In February 2018, Parry Nutraceuticals and Valensa International made a joint venture with Indian partner Synthite Industries to develop phycocyanin-based ingredients. This collaboration aimed to enhance the production and application of phycocyanin in dietary supplements and functional foods.

Forms Covered:

Powder

Liquid

Gels

Sources Covered:

Spirulina

Phormidium

Chlorella

Genetically Engineered Organisms

Other Sources

Distribution Channels Covered:

Online Platforms

Retailers

Direct Sales

Other Distribution Channels

Applications Covered:

Food & Beverages

Nutraceuticals

Cosmetics

Pharmaceuticals

Animal Feed

Other Applications

End Users Covered:

Industrial Processing

Commercial Use

Research & Development

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2022, 2023, 2024, 2026, and 2030
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Application Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL PHYCOCYANIN MARKET, BY FORM

- 5.1 Introduction
- 5.2 Powder
- 5.3 Liquid
- 5.4 Gels

6 GLOBAL PHYCOCYANIN MARKET, BY SOURCE

- 6.1 Introduction
- 6.2 Spirulina
- 6.3 Phormidium
- 6.4 Chlorella
- 6.5 Genetically Engineered Organisms
- 6.6 Other Sources

7 GLOBAL PHYCOCYANIN MARKET, BY DISTRIBUTION CHANNEL

- 7.1 Introduction
- 7.2 Online Platforms
- 7.3 Retailers
- 7.4 Direct Sales
- 7.5 Other Distribution Channels

8 GLOBAL PHYCOCYANIN MARKET, BY APPLICATION

- 8.1 Introduction
- 8.2 Food & Beverages
- 8.3 Nutraceuticals
- 8.4 Cosmetics
- 8.5 Pharmaceuticals
- 8.6 Animal Feed
- 8.7 Other Applications

9 GLOBAL PHYCOCYANIN MARKET, BY END USER

- 9.1 Introduction
- 9.2 Industrial Processing
- 9.3 Commercial Use

9.4 Research & Development

9.5 Other End Users

10 GLOBAL PHYCOCYANIN MARKET, BY GEOGRAPHY

10.1 Introduction

10.2 North America

10.2.1 US

10.2.2 Canada

10.2.3 Mexico

10.3 Europe

10.3.1 Germany

10.3.2 UK

10.3.3 Italy

10.3.4 France

10.3.5 Spain

10.3.6 Rest of Europe

10.4 Asia Pacific

10.4.1 Japan

10.4.2 China

10.4.3 India

10.4.4 Australia

10.4.5 New Zealand

10.4.6 South Korea

10.4.7 Rest of Asia Pacific

10.5 South America

10.5.1 Argentina

10.5.2 Brazil

10.5.3 Chile

10.5.4 Rest of South America

10.6 Middle East & Africa

10.6.1 Saudi Arabia

10.6.2 UAE

10.6.3 Qatar

10.6.4 South Africa

10.6.5 Rest of Middle East & Africa

11 KEY DEVELOPMENTS

- 11.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 11.2 Acquisitions & Mergers
- 11.3 New Product Launch
- 11.4 Expansions
- 11.5 Other Key Strategies

12 COMPANY PROFILING

- 12.1 DIC Corporation
- 12.2 Royal DSM N.V.
- 12.3 BASF SE
- 12.4 FMC Corporation
- 12.5 Chr. Hansen Holding A/S
- 12.6 Sensient Technologies Corporation
- 12.7 Kemin Industries Inc.
- 12.8 Parry Nutraceuticals
- 12.9 Japan Algae Corporation
- 12.10 Far East Bio-Tec Corporation
- 12.11 Valensa International
- 12.12 DDW The Color House
- 12.13 Phyco-Biotech Labs
- 12.14 SPIMACO Addwaeih
- 12.15 GNT Group B.V.
- 12.16 Cyanotech Corporation
- 12.17 Bluetec Naturals Corporation

List Of Tables

LIST OF TABLES

- Table 1 Global Phycocyanin Market Outlook, By Region (2022-2030) (\$MN)
- Table 2 Global Phycocyanin Market Outlook, By Form (2022-2030) (\$MN)
- Table 3 Global Phycocyanin Market Outlook, By Powder (2022-2030) (\$MN)
- Table 4 Global Phycocyanin Market Outlook, By Liquid (2022-2030) (\$MN)
- Table 5 Global Phycocyanin Market Outlook, By Gels (2022-2030) (\$MN)
- Table 6 Global Phycocyanin Market Outlook, By Source (2022-2030) (\$MN)
- Table 7 Global Phycocyanin Market Outlook, By Spirulina (2022-2030) (\$MN)
- Table 8 Global Phycocyanin Market Outlook, By Phormidium (2022-2030) (\$MN)
- Table 9 Global Phycocyanin Market Outlook, By Chlorella (2022-2030) (\$MN)
- Table 10 Global Phycocyanin Market Outlook, By Genetically Engineered Organisms (2022-2030) (\$MN)
- Table 11 Global Phycocyanin Market Outlook, By Other Sources (2022-2030) (\$MN)
- Table 12 Global Phycocyanin Market Outlook, By Distribution Channel (2022-2030) (\$MN)
- Table 13 Global Phycocyanin Market Outlook, By Online Platforms (2022-2030) (\$MN)
- Table 14 Global Phycocyanin Market Outlook, By Retailers (2022-2030) (\$MN)
- Table 15 Global Phycocyanin Market Outlook, By Direct Sales (2022-2030) (\$MN)
- Table 16 Global Phycocyanin Market Outlook, By Other Distribution Channels (2022-2030) (\$MN)
- Table 17 Global Phycocyanin Market Outlook, By Application (2022-2030) (\$MN)
- Table 18 Global Phycocyanin Market Outlook, By Food & Beverages (2022-2030) (\$MN)
- Table 19 Global Phycocyanin Market Outlook, By Nutraceuticals (2022-2030) (\$MN)
- Table 20 Global Phycocyanin Market Outlook, By Cosmetics (2022-2030) (\$MN)
- Table 21 Global Phycocyanin Market Outlook, By Pharmaceuticals (2022-2030) (\$MN)
- Table 22 Global Phycocyanin Market Outlook, By Animal Feed (2022-2030) (\$MN)
- Table 23 Global Phycocyanin Market Outlook, By Other Applications (2022-2030) (\$MN)
- Table 24 Global Phycocyanin Market Outlook, By End User (2022-2030) (\$MN)
- Table 25 Global Phycocyanin Market Outlook, By Industrial Processing (2022-2030) (\$MN)
- Table 26 Global Phycocyanin Market Outlook, By Commercial Use (2022-2030) (\$MN)
- Table 27 Global Phycocyanin Market Outlook, By Research & Development (2022-2030) (\$MN)
- Table 28 Global Phycocyanin Market Outlook, By Other End Users (2022-2030) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

I would like to order

Product name: Phycocyanin Market Forecasts to 2030 – Global Analysis By Form (Powder, Liquid and Gels), Source (Spirulina, Phormidium, Chlorella, Genetically Engineered Organisms and Other Sources), Distribution Channel, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/P460C21AB34AEN.html>

Price: US\$ 4,150.00 (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/P460C21AB34AEN.html>