

Global Chitosan Market Size Study, by Product (Food Grade, Industrial Grade, Pharmaceutical Grade, Research Grade), by Source (Crab, Krill, Shrimp, Squid), by Packaging Material (Glass, Metal, Paper & Plastic), by Application (Agrochemicals, Cosmetics & Personal Care, Food & Beverages, Medical & Pharmaceuticals, Water Treatment) and Regional Forecasts 2022-2032

<https://marketpublishers.com/r/GF1DBA405E3FEN.html>

Date: July 2024

Pages: 200

Price: US\$ 4,950.00 (Single User License)

ID: GF1DBA405E3FEN

Abstracts

Global Chitosan Market is valued approximately at USD 1.75 billion in 2023 and is anticipated to grow with a healthy growth rate of more than 12.80% over the forecast period 2024-2032. Chitosan is a naturally occurring polysaccharide obtained from the chitin found in the exoskeletons of crustaceans such as shrimp, crabs, and lobsters. Chitosan is created by treating chitin with an alkaline substance, usually sodium hydroxide, followed by a process of deacetylation, which removes acetyl groups from the chitin molecule. The increasing awareness of chitosan's properties, such as its biocompatibility, biodegradability, and antimicrobial activity, has led to a rise in demand for chitosan in diverse industries such as pharmaceuticals, food & beverages, cosmetics, agriculture, and water treatment. There is an extensive demand for biodegradable materials, including chitosan, with an increasing focus on environmentally friendly alternatives. Production of chitosan involves extracting and processing chitin from crustacean shells, which are costly and labor-intensive, subsequently hampering the adoption of chitosan. Expanding research & development activities to develop value-added chitosan products and formulations by modifying their properties or combining them with other materials is expected to contribute to the chitosan market growth.

The increasing awareness of chitosan's biocompatibility, biodegradability, and antimicrobial activity has led to its rising demand across various industries. In the pharmaceutical industry, chitosan is used in drug delivery systems, wound healing products, and tissue engineering due to its biocompatibility and controlled-release properties. The food and beverage industry utilizes chitosan as a natural additive, thickener, and stabilizer to improve texture, viscosity, and stability of food products. Additionally, the demand for chitosan in water treatment processes is driven by its ability to remove pollutants, heavy metals, and organic compounds. However, the high production costs associated with extracting and processing chitin from crustacean shells can hamper the widespread adoption of chitosan. Despite these challenges, ongoing research and development activities aimed at creating value-added chitosan products and formulations are expected to drive market growth.

Increasing uses of chitosan as a thickener and coagulant in food & healthcare industry is acting as a catalyzing factor for the market growth at a substantial rate. Food-grade chitosan is precisely processed and refined to meet the safety and quality standards in the food & beverage industry. It undergoes thorough purification to remove impurities and ensure its suitability for human consumption. Industrial-grade chitosan is primarily used in non-food industrial applications. It is less refined than food-grade chitosan and may have different molecular weights. Industrial-grade chitosan is utilized in wastewater treatment, textiles, cosmetics, agriculture, and biotechnology sectors. Pharmaceutical-grade chitosan undergoes rigorous quality control measures to ensure its purity, safety, and consistency in pharmaceutical and biomedical applications.

Furthermore, Chitosan is applied as a coating on glass surfaces to enhance their barrier properties and improve the packaging's overall performance. The chitosan coating helps to prevent the migration of gasses, moisture, and contaminants, thereby extending the shelf life of the packaged products. Chitosan is used as a laminating material for metal packaging. Applying a chitosan film as a barrier layer between the metal surface and the contents can improve the packaging's resistance to corrosion, oxidation, and moisture. Chitosan can also be incorporated into paper-based packaging materials to enhance their properties. Paper packaging acquires improved moisture resistance, antimicrobial properties, and mechanical strength by adding chitosan nanoparticles and chitosan-based coatings.

The key regions considered for the global Chitosan Market study include Asia Pacific, North America, Europe, Latin America, and Rest of the World. North America is a dominating region in the Chitosan Market in terms of revenue. The market growth in the

region is being attributed to factors including strong presence of established industries like healthcare and water treatment fuels demand for chitosan's various applications. Additionally, rising public health initiatives emphasize proper wastewater treatment, creating further market growth. Furthermore, growing awareness about natural ingredients is propelling the use of chitosan in cosmetics and weight management products. Whereas, the market in Asia Pacific is anticipated to grow at the fastest rate over the forecast period fueled by as the region is a major producer of seafood, which is resulting into an abundant supply of raw materials like shrimp and crab shells to make chitosan. Also, there is a growing demand for bio-based products and a rise in government support for eco-friendly industries. Moreover, countries like China and India have rapidly developing end-use industries for chitosan, such as water treatment, cosmetics, and agriculture. These factors combine to make Asia Pacific a leader in the global chitosan market.

Major market players included in this report are:

ADVANCED BIOPOLYMERS AS

AgraTech International, Inc.

BIO21 COMPANY LIMITED

Biosynth Ltd.

CD Bioparticles

ChitogenX Inc.

ChitoLytic

Dainichiseika Color & Chemicals Mfg. Co., Ltd.

Enargia Technologies

Fengchen Group Co., Ltd.

Glentham Life Sciences Ltd

Golden-Shell Pharmaceutical Co., Ltd.

Heppe Medical Chitosan GmbH

ISF Chitin & Marine Products LLP

Iterro, Inc.

The detailed segments and sub-segments of the market are explained below:

By Product

Food Grade

Industrial Grade

Pharmaceutical Grade

Research Grade

By Source

Crab

Krill

Shrimp

Squid

By Packaging Material

Glass

Metal

Paper & Plastic

By Application

Agrochemicals

Cosmetics & Personal Care

Food & Beverages

Medical & Pharmaceuticals

Water Treatment

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

ROE

Asia Pacific

China

India

Japan

Australia

South Korea

RoAPAC

Latin America

Brazil

Mexico

RoLA

Middle East & Africa

Saudi Arabia

South Africa

RoMEA

Years considered for the study are as follows:

Historical year – 2022

Base year – 2023

Forecast period – 2024 to 2032

Key Takeaways:

Market Estimates & Forecast for 10 years from 2022 to 2032.

Annualized revenues and regional level analysis for each market segment.

Detailed analysis of geographical landscape with Country level analysis of major regions.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations on future market approach.

Analysis of competitive structure of the market.

Demand side and supply side analysis of the market.

Contents

CHAPTER 1. GLOBAL CHITOSAN MARKET EXECUTIVE SUMMARY

- 1.1. Global Chitosan Market Size & Forecast (2022-2032)
- 1.2. Regional Summary
- 1.3. Segmental Summary
 - 1.3.1. By Product
 - 1.3.2. By Source
 - 1.3.3. By Packaging Material
 - 1.3.4. By Application
- 1.4. Key Trends
- 1.5. Recession Impact
- 1.6. Analyst Recommendation & Conclusion

CHAPTER 2. GLOBAL CHITOSAN MARKET DEFINITION AND RESEARCH ASSUMPTIONS

- 2.1. Research Objective
- 2.2. Market Definition
- 2.3. Research Assumptions
 - 2.3.1. Inclusion & Exclusion
 - 2.3.2. Limitations
 - 2.3.3. Supply Side Analysis
 - 2.3.3.1. Availability
 - 2.3.3.2. Infrastructure
 - 2.3.3.3. Regulatory Environment
 - 2.3.3.4. Market Competition
 - 2.3.3.5. Economic Viability (Consumer's Perspective)
 - 2.3.4. Demand Side Analysis
 - 2.3.4.1. Regulatory frameworks
 - 2.3.4.2. Technological Advancements
 - 2.3.4.3. Environmental Considerations
 - 2.3.4.4. Consumer Awareness & Acceptance
- 2.4. Estimation Methodology
- 2.5. Years Considered for the Study
- 2.6. Currency Conversion Rates

CHAPTER 3. GLOBAL CHITOSAN MARKET DYNAMICS

Global Chitosan Market Size Study, by Product (Food Grade, Industrial Grade, Pharmaceutical Grade, Research Gr...

3.1. Market Drivers

- 3.1.1. Increasing demand for biodegradable materials
- 3.1.2. Growing applications in diverse industries

3.2. Market Challenges

- 3.2.1. High production costs associated with extracting and processing chitin from crustacean shells

3.3. Market Opportunities

- 3.3.1. Adoption of sustainable agricultural practices
- 3.3.2. Growing investment in research and development activities x

CHAPTER 4. GLOBAL CHITOSAN MARKET INDUSTRY ANALYSIS

4.1. Porter's 5 Force Model

- 4.1.1. Bargaining Power of Suppliers
- 4.1.2. Bargaining Power of Buyers
- 4.1.3. Threat of New Entrants
- 4.1.4. Threat of Substitutes
- 4.1.5. Competitive Rivalry
- 4.1.6. Futuristic Approach to Porter's 5 Force Model
- 4.1.7. Porter's 5 Force Impact Analysis

4.2. PESTEL Analysis

- 4.2.1. Political
- 4.2.2. Economical
- 4.2.3. Social
- 4.2.4. Technological
- 4.2.5. Environmental
- 4.2.6. Legal

4.3. Top investment opportunity

4.4. Top winning strategies

4.5. Disruptive Trends

4.6. Industry Expert Perspective

4.7. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL CHITOSAN MARKET SIZE & FORECASTS BY PRODUCT 2022-2032

5.1. Segment Dashboard

5.2. Global Chitosan Market: Product Revenue Trend Analysis, 2022 & 2032 (USD)

Billion)

- 5.2.1. Food Grade
- 5.2.2. Industrial Grade
- 5.2.3. Pharmaceutical Grade
- 5.2.4. Research Grade

CHAPTER 6. GLOBAL CHITOSAN MARKET SIZE & FORECASTS BY SOURCE 2022-2032

- 6.1. Segment Dashboard
- 6.2. Global Chitosan Market: Source Revenue Trend Analysis, 2022 & 2032 (USD Billion)
 - 6.2.1. Crab
 - 6.2.2. Krill
 - 6.2.3. Shrimp
 - 6.2.4. Squid

CHAPTER 7. GLOBAL CHITOSAN MARKET SIZE & FORECASTS BY PACKAGING MATERIAL 2022-2032

- 7.1. Segment Dashboard
- 7.2. Global Chitosan Market: Packaging Material Revenue Trend Analysis, 2022 & 2032 (USD Billion)
 - 7.2.1. Glass
 - 7.2.2. Metal
 - 7.2.3. Paper & Plastic

CHAPTER 8. GLOBAL CHITOSAN MARKET SIZE & FORECASTS BY APPLICATION 2022-2032

- 8.1. Segment Dashboard
- 8.2. Global Chitosan Market: Application Revenue Trend Analysis, 2022 & 2032 (USD Billion)
 - 8.2.1. Agrochemicals
 - 8.2.2. Cosmetics & Personal Care
 - 8.2.3. Food & Beverages
 - 8.2.4. Medical & Pharmaceuticals
 - 8.2.5. Water Treatment

CHAPTER 9. GLOBAL CHITOSAN MARKET SIZE & FORECASTS BY REGION 2022-2032

9.1. North America Chitosan Market

9.1.1. U.S. Chitosan Market

9.1.1.1. Product breakdown size & forecasts, 2022-2032

9.1.1.2. Source breakdown size & forecasts, 2022-2032

9.1.1.3. Packaging Material breakdown size & forecasts, 2022-2032

9.1.1.4. Application breakdown size & forecasts, 2022-2032

9.1.2. Canada Chitosan Market

9.2. Europe Chitosan Market

9.2.1. UK Chitosan Market

9.2.2. Germany Chitosan Market

9.2.3. France Chitosan Market

9.2.4. Spain Chitosan Market

9.2.5. Italy Chitosan Market

9.2.6. Rest of Europe Chitosan Market

9.3. Asia-Pacific Chitosan Market

9.3.1. China Chitosan Market

9.3.2. India Chitosan Market

9.3.3. Japan Chitosan Market

9.3.4. Australia Chitosan Market

9.3.5. South Korea Chitosan Market

9.3.6. Rest of Asia Pacific Chitosan Market

9.4. Latin America Chitosan Market

9.4.1. Brazil Chitosan Market

9.4.2. Mexico Chitosan Market

9.4.3. Rest of Latin America Chitosan Market

9.5. Middle East & Africa Chitosan Market

9.5.1. Saudi Arabia Chitosan Market

9.5.2. South Africa Chitosan Market

9.5.3. Rest of Middle East & Africa Chitosan Market

CHAPTER 10. COMPETITIVE INTELLIGENCE

10.1. Key Company SWOT Analysis

10.1.1. Company

10.1.2. Company

10.1.3. Company

10.2. Top Market Strategies

10.3. Company Profiles

10.3.1. ADVANCED BIOPOLYMERS AS

10.3.1.1. Key Information

10.3.1.2. Overview

10.3.1.3. Financial (Subject to Data Availability)

10.3.1.4. Product Summary

10.3.1.5. Market Strategies

10.3.2. Iterro, Inc.

10.3.3. Golden-Shell Pharmaceutical Co., Ltd.

10.3.4. AgraTech International, Inc.

10.3.5. BIO21 COMPANY LIMITED

10.3.6. Biosynth Ltd.

10.3.7. CD Bioparticles

10.3.8. ChitogenX Inc.

10.3.9. ChitoLytic

10.3.10. Dainichiseika Color & Chemicals Mfg. Co., Ltd.

10.3.11. Enargia Technologies

10.3.12. Fengchen Group Co., Ltd.

10.3.13. Glentham Life Sciences Ltd

10.3.14. Heppe Medical Chitosan GmbH

10.3.15. ISF Chitin & Marine Products LLP

CHAPTER 11. RESEARCH PROCESS

11.1. Research Process

11.1.1. Data Mining

11.1.2. Analysis

11.1.3. Market Estimation

11.1.4. Validation

11.1.5. Publishing

11.2. Research Attributes

List Of Tables

LIST OF TABLES

TABLE 1. Global Chitosan market, report scope

TABLE 2. Global Chitosan market estimates & forecasts by Region 2022-2032 (USD Billion)

TABLE 3. Global Chitosan market estimates & forecasts by Product 2022-2032 (USD Billion)

TABLE 4. Global Chitosan market estimates & forecasts by Source 2022-2032 (USD Billion)

TABLE 5. Global Chitosan market estimates & forecasts by Packaging Material 2022-2032 (USD Billion)

TABLE 6. Global Chitosan market estimates & forecasts by Application 2022-2032 (USD Billion)

TABLE 7. Global Chitosan market by segment, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 8. Global Chitosan market by region, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 9. Global Chitosan market by segment, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 10. Global Chitosan market by region, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 11. Global Chitosan market by segment, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 12. Global Chitosan market by region, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 13. Global Chitosan market by segment, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 14. Global Chitosan market by region, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 15. U.S. Chitosan market estimates & forecasts, 2022-2032 (USD Billion)

TABLE 16. U.S. Chitosan market estimates & forecasts by segment 2022-2032 (USD Billion)

TABLE 17. U.S. Chitosan market estimates & forecasts by segment 2022-2032 (USD Billion)

TABLE 18. Canada Chitosan market estimates & forecasts, 2022-2032 (USD Billion)

TABLE 19. Canada Chitosan market estimates & forecasts by segment 2022-2032 (USD Billion)

TABLE 20. Canada Chitosan market estimates & forecasts by segment 2022-2032
(USD Billion)

.....

This list is not complete, final report does contain more than 100 tables. The list may be updated in the final deliverable.

List Of Figures

LIST OF FIGURES

- FIG 1. Global Chitosan market, research methodology
- FIG 2. Global Chitosan market, market estimation techniques
- FIG 3. Global market size estimates & forecast methods.
- FIG 4. Global Chitosan market, key trends 2023
- FIG 5. Global Chitosan market, growth prospects 2022-2032
- FIG 6. Global Chitosan market, porters 5 force model
- FIG 7. Global Chitosan market, PESTEL analysis
- FIG 8. Global Chitosan market, value chain analysis
- FIG 9. Global Chitosan market by segment, 2022 & 2032 (USD Billion)
- FIG 10. Global Chitosan market by segment, 2022 & 2032 (USD Billion)
- FIG 11. Global Chitosan market by segment, 2022 & 2032 (USD Billion)
- FIG 12. Global Chitosan market by segment, 2022 & 2032 (USD Billion)
- FIG 13. Global Chitosan market by segment, 2022 & 2032 (USD Billion)
- FIG 14. Global Chitosan market, regional snapshot 2022 & 2032
- FIG 15. North America Chitosan market 2022 & 2032 (USD Billion)
- FIG 16. Europe Chitosan market 2022 & 2032 (USD Billion)
- FIG 17. Asia pacific Chitosan market 2022 & 2032 (USD Billion)
- FIG 18. Latin America Chitosan market 2022 & 2032 (USD Billion)
- FIG 19. Middle East & Africa Chitosan market 2022 & 2032 (USD Billion)
- FIG 20. Global Chitosan market, company market share analysis (2023)

.....

This list is not complete, final report does contain more than 50 figures. The list may be updated in the final deliverable.

I would like to order

Product name: Global Chitosan Market Size Study, by Product (Food Grade, Industrial Grade, Pharmaceutical Grade, Research Grade), by Source (Crab, Krill, Shrimp, Squid), by Packaging Material (Glass, Metal, Paper & Plastic), by Application (Agrochemicals, Cosmetics & Personal Care, Food & Beverages, Medical & Pharmaceuticals, Water Treatment) and Regional Forecasts 2022-2032

Product link: <https://marketpublishers.com/r/GF1DBA405E3FEN.html>

Price: US\$ 4,950.00 (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/GF1DBA405E3FEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:

Last name:

Email:

Company:

Address:

City:

Zip code:

Country:

Tel:

Fax:

Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970