

Global Mixed Mode Chromatography Resin Market Size Study, by Technique (Ion Exchange-Hydrophobic, Hydroxyapatite), End-use (Pharmaceutical & Biotechnology), and Regional Forecasts 2022-2032

https://marketpublishers.com/r/GF1D3768E620EN.html

Date: January 2025

Pages: 285

Price: US\$ 3,218.00 (Single User License)

ID: GF1D3768E620EN

Abstracts

The Global Mixed Mode Chromatography Resin Market, valued at approximately USD 104.63 million in 2023, is set to grow at a remarkable CAGR of 12.30% during the forecast period 2024-2032. Mixed mode chromatography resins represent a breakthrough in separation technologies, enabling the purification of complex biomolecules through the use of multiple interaction mechanisms. These resins have emerged as indispensable tools for pharmaceutical and biotechnological advancements, allowing for efficient separation of proteins, monoclonal antibodies, and other biologics critical to drug development and manufacturing.

The market's growth is driven by the surge in biologics and biosimilar drug development, coupled with the rising demand for cost-effective and high-yield purification methods. Technological innovations in mixed mode chromatography, such as improved ligand chemistry and robust resin matrices, further enhance their adoption. However, challenges related to high initial costs of chromatography systems and complex regulatory landscapes may moderately hinder the market's growth trajectory. Manufacturers are addressing these concerns by focusing on scalability and compliance with Good Manufacturing Practices (GMP).

Regionally, North America dominates the global market owing to its advanced biopharmaceutical sector and extensive research investments. The region's strong regulatory framework further fuels the adoption of innovative chromatography technologies. Europe follows closely, driven by its emphasis on biopharmaceutical production and government initiatives supporting life sciences research. Meanwhile, the



Asia-Pacific region is poised for the fastest growth, with countries like China and India emerging as biopharmaceutical hubs due to their increasing investment in biotechnology and contract research organizations (CROs).

The competitive landscape of the Mixed Mode Chromatography Resin Market features both established players and emerging innovators striving to cater to the evolving needs of the biopharmaceutical industry. Strategic collaborations, new product launches, and R&D investments remain key growth strategies among market players.

Major market players included in this report are:

GE Healthcare
Merck KGaA
Thermo Fisher Scientific Inc.
Bio-Rad Laboratories, Inc.
Tosoh Corporation
Pall Corporation (Danaher Corporation)
Sartorius AG
Agilent Technologies, Inc.
W. R. Grace & Co.
Repligen Corporation
Avantor, Inc.
Mitsubishi Chemical Corporation
JSR Life Sciences LLC
Purolite Corporation



Italy

Rest of Europe

PerkinElmer, Inc. The detailed segments and sub-segment of the market are explained below: By Technique: Ion Exchange-Hydrophobic Hydroxyapatite By End-use: Pharmaceutical & Biotechnology By Region: North America: U.S. Canada Europe: UK Germany France Spain

Global Mixed Mode Chromatography Resin Market Size Study, by Technique (Ion Exchange-Hydrophobic, Hydroxyapati...



Asia-Pacific:
China
India
Japan
Australia
South Korea
Rest of Asia-Pacific
Latin America:
Brazil
Mexico
Rest of Latin America
Middle East & Africa:
Saudi Arabia
South Africa
Rest of Middle East & Africa
Years considered for the study are as follows:
Historical year: 2022



Base year: 2023

Forecast period: 2024 to 2032

Key Takeaways:

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

Detailed regional and segmental insights with annualized revenue projections.

Comprehensive analysis of market dynamics including drivers, challenges, and opportunities.

Strategic insights into competitive landscapes and market positioning of key players.

Recommendations for stakeholders to capitalize on emerging trends and growth opportunities.



Contents

CHAPTER 1. GLOBAL MIXED MODE CHROMATOGRAPHY RESIN MARKET EXECUTIVE SUMMARY

- 1.1. Global Mixed Mode Chromatography Resin Market Size & Forecast (2022-2032)
- 1.2. Regional Summary
- 1.3. Segmental Summary
 - 1.3.1. By Technique
 - 1.3.2. By End-use
- 1.4. Key Trends
- 1.5. Recession Impact
- 1.6. Analyst Recommendation & Conclusion

CHAPTER 2. GLOBAL MIXED MODE CHROMATOGRAPHY RESIN 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 MIXED MODE CHROMATOGRAPHY RESIN MARKET DYNAMICS



- 3.1. Market Drivers
 - 3.1.1. Surge in Biologics and Biosimilar Drug Development
 - 3.1.2. Rising Demand for Cost-effective and High-yield Purification Methods
- 3.1.3. Technological Innovations in Ligand Chemistry and Resin Matrices
- 3.2. Market Challenges
 - 3.2.1. High Initial Costs of Chromatography Systems
 - 3.2.2. Complex Regulatory Landscapes
- 3.3. Market Opportunities
 - 3.3.1. Expansion in Pharmaceutical & Biotechnology Applications
 - 3.3.2. Scalability and Compliance with Good Manufacturing Practices (GMP)
 - 3.3.3. Strategic Collaborations and R&D Investments

CHAPTER 4. GLOBAL MIXED MODE CHROMATOGRAPHY RESIN 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 Opportunities
- 4.4. Top Winning Strategies
- 4.5. Disruptive Trends
- 4.6. Industry Expert Perspective
- 4.7. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL MIXED MODE CHROMATOGRAPHY RESIN MARKET SIZE & FORECASTS BY TECHNIQUE 2022-2032



- 5.1. Segment Dashboard
- 5.2. Global Mixed Mode Chromatography Resin Market: Technique Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)
 - 5.2.1. Ion Exchange-Hydrophobic
 - 5.2.2. Hydroxyapatite

CHAPTER 6. GLOBAL MIXED MODE CHROMATOGRAPHY RESIN MARKET SIZE & FORECASTS BY END-USE 2022-2032

- 6.1. Segment Dashboard
- 6.2. Global Mixed Mode Chromatography Resin Market: End-use Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)
 - 6.2.1. Pharmaceutical
 - 6.2.2. Biotechnology

CHAPTER 7. GLOBAL MIXED MODE CHROMATOGRAPHY RESIN MARKET SIZE & FORECASTS BY REGION 2022-2032

- 7.1. North America Mixed Mode Chromatography Resin Market
 - 7.1.1. U.S. Mixed Mode Chromatography Resin Market
 - 7.1.1.1 Technique Breakdown Size & Forecasts, 2022-2032
 - 7.1.1.2. End-use Breakdown Size & Forecasts, 2022-2032
 - 7.1.1.3. Market Share by Key Players, 2022-2032
 - 7.1.2. Canada Mixed Mode Chromatography Resin Market
 - 7.1.2.1. Technique Breakdown Size & Forecasts, 2022-2032
 - 7.1.2.2. End-use Breakdown Size & Forecasts, 2022-2032
 - 7.1.2.3. Market Share by Key Players, 2022-2032
- 7.2. Europe Mixed Mode Chromatography Resin Market
- 7.2.1. UK Mixed Mode Chromatography Resin Market
- 7.2.2. Germany Mixed Mode Chromatography Resin Market
- 7.2.3. France Mixed Mode Chromatography Resin Market
- 7.2.4. Spain Mixed Mode Chromatography Resin Market
- 7.2.5. Italy Mixed Mode Chromatography Resin Market
- 7.2.6. Rest of Europe Mixed Mode Chromatography Resin Market
- 7.3. Asia-Pacific Mixed Mode Chromatography Resin Market
 - 7.3.1. China Mixed Mode Chromatography Resin Market
 - 7.3.2. India Mixed Mode Chromatography Resin Market
 - 7.3.3. Japan Mixed Mode Chromatography Resin Market



- 7.3.4. Australia Mixed Mode Chromatography Resin Market
- 7.3.5. South Korea Mixed Mode Chromatography Resin Market
- 7.3.6. Rest of Asia-Pacific Mixed Mode Chromatography Resin Market
- 7.4. Latin America Mixed Mode Chromatography Resin Market
- 7.4.1. Brazil Mixed Mode Chromatography Resin Market
- 7.4.2. Mexico Mixed Mode Chromatography Resin Market
- 7.4.3. Rest of Latin America Mixed Mode Chromatography Resin Market
- 7.5. Middle East & Africa Mixed Mode Chromatography Resin Market
 - 7.5.1. Saudi Arabia Mixed Mode Chromatography Resin Market
 - 7.5.2. South Africa Mixed Mode Chromatography Resin Market
 - 7.5.3. Rest of Middle East & Africa Mixed Mode Chromatography Resin Market

CHAPTER 8. COMPETITIVE INTELLIGENCE

- 8.1. Key Company SWOT Analysis
 - 8.1.1. GE Healthcare
 - 8.1.2. Merck KGaA
 - 8.1.3. Thermo Fisher Scientific Inc.
- 8.2. Top Market Strategies
- 8.3. Company Profiles
 - 8.3.1. GE Healthcare
 - 8.3.1.1. Key Information
 - 8.3.1.2. Overview
 - 8.3.1.3. Financial (Subject to Data Availability)
 - 8.3.1.4. Product Summary
 - 8.3.1.5. Market Strategies
 - 8.3.2. Merck KGaA
 - 8.3.3. Thermo Fisher Scientific Inc.
 - 8.3.4. Bio-Rad Laboratories, Inc.
 - 8.3.5. Tosoh Corporation
 - 8.3.6. Pall Corporation (Danaher Corporation)
 - 8.3.7. Sartorius AG
 - 8.3.8. Agilent Technologies, Inc.
 - 8.3.9. W. R. Grace & Co.
 - 8.3.10. Repligen Corporation

CHAPTER 9. RESEARCH PROCESS

9.1. Research Process



- 9.1.1. Data Mining
- 9.1.2. Analysis
- 9.1.3. Market Estimation
- 9.1.4. Validation
- 9.1.5. Publishing
- 9.2. Research Attributes

12. LIST OF TABLES

- TABLE 1. Global Mixed Mode Chromatography Resin Market, Report Scope
- TABLE 2. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by Region 2022-2032 (USD Million/Billion)
- TABLE 3. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by Technique 2022-2032 (USD Million/Billion)
- TABLE 4. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by End-use 2022-2032 (USD Million/Billion)
- TABLE 5. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by Region 2022-2032 (USD Million/Billion)
- TABLE 6. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by Technique 2022-2032 (USD Million/Billion)
- TABLE 7. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by End-use 2022-2032 (USD Million/Billion)
- TABLE 8. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by Region 2022-2032 (USD Million/Billion)
- TABLE 9. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by Technique 2022-2032 (USD Million/Billion)
- TABLE 10. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by End-use 2022-2032 (USD Million/Billion)
- TABLE 11. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by Region 2022-2032 (USD Million/Billion)
- TABLE 12. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by Technique 2022-2032 (USD Million/Billion)
- TABLE 13. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by End-use 2022-2032 (USD Million/Billion)
- TABLE 14. Global Mixed Mode Chromatography Resin Market Estimates & Forecasts by Region 2022-2032 (USD Million/Billion)
- TABLE 15. U.S. Mixed Mode Chromatography Resin Market Estimates & Forecasts, 2022-2032 (USD Million/Billion)
- TABLE 16. U.S. Mixed Mode Chromatography Resin Market Estimates & Forecasts



by Technique 2022-2032 (USD Million/Billion)

- TABLE 17. U.S. Mixed Mode Chromatography Resin Market Estimates & Forecasts by End-use 2022-2032 (USD Million/Billion)
- TABLE 18. Canada Mixed Mode Chromatography Resin Market Estimates & Forecasts, 2022-2032 (USD Million/Billion)
- TABLE 19. Canada Mixed Mode Chromatography Resin Market Estimates & Forecasts by Technique 2022-2032 (USD Million/Billion)
- TABLE 20. Canada Mixed Mode Chromatography Resin Market Estimates & Forecasts by End-use 2022-2032 (USD Million/Billion)

• ...

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

12. LIST OF FIGURES

- FIG 1. Global Mixed Mode Chromatography Resin Market, Research Methodology
- FIG 2. Global Mixed Mode Chromatography Resin Market, Market Estimation Techniques
- FIG 3. Global Market Size Estimates & Forecast Methods
- FIG 4. Global Mixed Mode Chromatography Resin Market, Key Trends 2023
- FIG 5. Global Mixed Mode Chromatography Resin Market, Growth Prospects 2022-2032
- FIG 6. Global Mixed Mode Chromatography Resin Market, Porter's 5 Force Model
- FIG 7. Global Mixed Mode Chromatography Resin Market, PESTEL Analysis
- FIG 8. Global Mixed Mode Chromatography Resin Market, Value Chain Analysis
- FIG 9. Global Mixed Mode Chromatography Resin Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 10. Global Mixed Mode Chromatography Resin Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 11. Global Mixed Mode Chromatography Resin Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 12. Global Mixed Mode Chromatography Resin Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 13. Global Mixed Mode Chromatography Resin Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 14. Global Mixed Mode Chromatography Resin Market, Regional Snapshot 2022
 2032
- FIG 15. North America Mixed Mode Chromatography Resin Market 2022 & 2032 (USD Million/Billion)



- FIG 16. Europe Mixed Mode Chromatography Resin Market 2022 & 2032 (USD Million/Billion)
- FIG 17. Asia-Pacific Mixed Mode Chromatography Resin Market 2022 & 2032 (USD Million/Billion)
- FIG 18. Latin America Mixed Mode Chromatography Resin Market 2022 & 2032 (USD Million/Billion)
- FIG 19. Middle East & Africa Mixed Mode Chromatography Resin Market 2022 & 2032 (USD Million/Billion)
- FIG 20. Global Mixed Mode Chromatography Resin Market, Company Market Share Analysis (2023)

• ...

This list is not complete; the 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 Mixed Mode Chromatography Resin Market Size Study, by Technique (Ion

Exchange-Hydrophobic, Hydroxyapatite), End-use (Pharmaceutical & Biotechnology), and

Regional Forecasts 2022-2032

Product link: https://marketpublishers.com/r/GF1D3768E620EN.html

Price: US\$ 3,218.00 (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/GF1D3768E620EN.html