

Poly-Gamma-Glutamic Acid Industry Research Report 2023

<https://marketpublishers.com/r/P81D5186AE66EN.html>

Date: August 2023

Pages: 95

Price: US\$ 2,950.00 (Single User License)

ID: P81D5186AE66EN

Abstracts

Poly-gamma-glutamic Acid (CAS 84960-48-5), is a water-soluble, biodegradable, non-toxic, biopolymer prepared by microbial fermentation, used in food, cosmetics, etc.

Highlights

The global Poly-Gamma-Glutamic Acid market is projected to reach US\$ million by 2028 from an estimated US\$ million in 2022, at a CAGR of % during 2024 and 2029.

In the Consumption market, ?-Polyglutamic acid in China takes about 75% market share, which is the biggest consumption area in the current market pattern. The United States ranks the second consumption area, with market share about 5%.

In this industry, the main players are Vedan Biotechnology, Bioleaders, Shandong Freda, Nanjing Shineking Biotech, Guanghua Group. In general, the main players are concentrated in China.

In terms of product, 700,000 Molecular Weight is the largest segment, with a share over 50%. And based on the application, the largest application is Fertilizer, followed by Food & Drinks, etc.

Report Scope

This report aims to provide a comprehensive presentation of the global market for Poly-Gamma-Glutamic Acid, with both quantitative and qualitative analysis, to help readers develop business/growth strategies, assess the market competitive situation, analyze their position in the current marketplace, and make informed business decisions

regarding Poly-Gamma-Glutamic Acid.

The Poly-Gamma-Glutamic Acid market size, estimations, and forecasts are provided in terms of output/shipments (MT) and revenue (\$ millions), considering 2022 as the base year, with history and forecast data for the period from 2018 to 2029. This report segments the global Poly-Gamma-Glutamic Acid market comprehensively. Regional market sizes, concerning products by types, by application, and by players, are also provided. The influence of COVID-19 and the Russia-Ukraine War were considered while estimating market sizes.

For a more in-depth understanding of the market, the report provides profiles of the competitive landscape, key competitors, and their respective market ranks. The report also discusses technological trends and new product developments.

The report will help the Poly-Gamma-Glutamic Acid manufacturers, new entrants, and industry chain related companies in this market with information on the revenues, production, and average price for the overall market and the sub-segments across the different segments, by company, product type, application, and regions.

Key Companies & Market Share Insights

In this section, the readers will gain an understanding of the key players competing. This report has studied the key growth strategies, such as innovative trends and developments, intensification of product portfolio, mergers and acquisitions, collaborations, new product innovation, and geographical expansion, undertaken by these participants to maintain their presence. Apart from business strategies, the study includes current developments and key financials. The readers will also get access to the data related to global revenue, price, and sales by manufacturers for the period 2017-2022. This all-inclusive report will certainly serve the clients to stay updated and make effective decisions in their businesses. Some of the prominent players reviewed in the research report include:

Vedan Biotechnology

Bioleaders

Ichimaru Pharcos

Shandong Freda

Nanjing Shineking Biotech

Guanghua Group

Nanjing Sai Taisi Biotechnology

Zytex

Shandong Changrui

Shandong Taihe Biotech

Lion King Biotechnology

Product Type Insights

Global markets are presented by Poly-Gamma-Glutamic Acid type, along with growth forecasts through 2029. Estimates on production and value are based on the price in the supply chain at which the Poly-Gamma-Glutamic Acid are procured by the manufacturers.

This report has studied every segment and provided the market size using historical data. They have also talked about the growth opportunities that the segment may pose in the future. This study bestows production and revenue data by type, and during the historical period (2018-2023) and forecast period (2024-2029).

Poly-Gamma-Glutamic Acid segment by Type

Molecular Weight Below 20,000

700,000 Molecular Weight

1 Million Molecular Weight

Above 1.5 Million Molecular Weight

Application Insights

This report has provided the market size (production and revenue data) by application, during the historical period (2018-2023) and forecast period (2024-2029).

This report also outlines the market trends of each segment and consumer behaviors impacting the Poly-Gamma-Glutamic Acid market and what implications these may have on the industry's future. This report can help to understand the relevant market and consumer trends that are driving the Poly-Gamma-Glutamic Acid market.

Poly-Gamma-Glutamic Acid segment by Application

Fertilizer

Medicines & Health Products

Food & Beverages

Cosmetic

Others

Regional Outlook

This section of the report provides key insights regarding various regions and the key players operating in each region. Economic, social, environmental, technological, and political factors have been taken into consideration while assessing the growth of the particular region/country. The readers will also get their hands on the revenue and sales data of each region and country for the period 2018-2029.

The market has been segmented into various major geographies, including North America, Europe, Asia-Pacific, South America. Detailed analysis of major countries such as the USA, Germany, the U.K., Italy, France, China, Japan, South Korea, Southeast Asia, and India will be covered within the regional segment. For market estimates, data are going to be provided for 2022 because of the base year, with estimates for 2023 and forecast value for 2029.

North America

United States

Canada

Europe

Germany

France

U.K.

Italy

Russia

Asia-Pacific

China

Japan

South Korea

India

Australia

China Taiwan

Indonesia

Thailand

Malaysia

Latin America

Mexico

Brazil

Argentina

Key Drivers & Barriers

High-impact rendering factors and drivers have been studied in this report to aid the readers to understand the general development. Moreover, the report includes restraints and challenges that may act as stumbling blocks on the way of the players. This will assist the users to be attentive and make informed decisions related to business. Specialists have also laid their focus on the upcoming business prospects.

COVID-19 and Russia-Ukraine War Influence Analysis

The readers in the section will understand how the Poly-Gamma-Glutamic Acid market scenario changed across the globe during the pandemic, post-pandemic and Russia-Ukraine War. The study is done keeping in view the changes in aspects such as demand, consumption, transportation, consumer behavior, supply chain management, export and import, and production. The industry experts have also highlighted the key factors that will help create opportunities for players and stabilize the overall industry in the years to come.

Reasons to Buy This Report

This report will help the readers to understand the competition within the industries and strategies for the competitive environment to enhance the potential profit. The report also focuses on the competitive landscape of the global Poly-Gamma-Glutamic Acid market, and introduces in detail the market share, industry ranking, competitor ecosystem, market performance, new product development, operation situation, expansion, and acquisition. etc. of the main players, which helps the readers to identify the main competitors and deeply understand the competition pattern of the market.

This report will help stakeholders to understand the global industry status and trends of Poly-Gamma-Glutamic Acid and provides them with information on key market drivers, restraints, challenges, and opportunities.

This report will help stakeholders to understand competitors better and gain more insights to strengthen their position in their businesses. The competitive landscape section includes the market share and rank (in volume and value), competitor ecosystem, new product development, expansion, and acquisition.

This report stays updated with novel technology integration, features, and the latest developments in the market

This report helps stakeholders to understand the COVID-19 and Russia-Ukraine War Influence on the Poly-Gamma-Glutamic Acid industry.

This report helps stakeholders to gain insights into which regions to target globally

This report helps stakeholders to gain insights into the end-user perception concerning the adoption of Poly-Gamma-Glutamic Acid.

This report helps stakeholders to identify some of the key players in the market and understand their valuable contribution.

Core Chapters

Chapter 1: Research objectives, research methods, data sources, data cross-validation;

Chapter 2: Introduces the report scope of the report, executive summary of different market segments (by region, product type, application, etc), including the market size of each market segment, future development potential, and so on. It offers a high-level view of the current state of the market and its likely evolution in the short to mid-term, and long term.

Chapter 3: Detailed analysis of Poly-Gamma-Glutamic Acid manufacturers competitive landscape, price, production and value market share, latest development plan, merger, and acquisition information, etc.

Chapter 4: Provides profiles of key players, introducing the basic situation of the main companies in the market in detail, including product production/output, value, price, gross margin, product introduction, recent development, etc.

Chapter 5: Production/output, value of Poly-Gamma-Glutamic Acid by region/country. It provides a quantitative analysis of the market size and development potential of each

region in the next six years.

Chapter 6: Consumption of Poly-Gamma-Glutamic Acid in regional level and country level. It provides a quantitative analysis of the market size and development potential of each region and its main countries and introduces the market development, future development prospects, market space, and production of each country in the world.

Chapter 7: Provides the analysis of various market segments by type, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different market segments.

Chapter 8: Provides the analysis of various market segments by application, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different downstream markets.

Chapter 9: Analysis of industrial chain, including the upstream and downstream of the industry.

Chapter 10: Introduces the market dynamics, latest developments of the market, the driving factors and restrictive factors of the market, the challenges and risks faced by manufacturers in the industry, and the analysis of relevant policies in the industry.

Chapter 11: The main points and conclusions of the report.

Frequently Asked Questions

Which product segment grabbed the largest share in the Product Name market?

How is the competitive scenario of the Product Name market?

Which are the key factors aiding the Product Name market growth?

Which are the prominent players in the Product Name market?

Which region holds the maximum share in the Product Name market?

What will be the CAGR of the Product Name market during the forecast period?

Which application segment emerged as the leading segment in the Product

Name market?

What key trends are likely to emerge in the Product Name market in the coming years?

What will be the Product Name market size by 2028?

Which company held the largest share in the Product Name market?

Contents

LIST OF TABLES

Table 1. Secondary Sources

Table 2. Primary Sources

Table 3. Market Value Comparison by Type (2018 VS 2022 VS 2029) & (US\$ Million)

Table 4. Market Value Comparison by Application (2018 VS 2022 VS 2029) & (US\$ Million)

Table 5. Global Poly-Gamma-Glutamic Acid Production by Manufacturers (MT) & (2018-2023)

Table 6. Global Poly-Gamma-Glutamic Acid Production Market Share by Manufacturers

Table 7. Global Poly-Gamma-Glutamic Acid Production Value by Manufacturers (US\$ Million) & (2018-2023)

Table 8. Global Poly-Gamma-Glutamic Acid Production Value Market Share by Manufacturers (2018-2023)

Table 9. Global Poly-Gamma-Glutamic Acid Average Price (US\$/Ton) of Key Manufacturers (2018-2023)

Table 10. Global Poly-Gamma-Glutamic Acid Industry Manufacturers Ranking, 2021 VS 2022 VS 2023

Table 11. Global Poly-Gamma-Glutamic Acid Manufacturers, Product Type & Application

Table 12. Global Manufacturers Market Concentration Ratio (CR5 and HHI)

Table 13. Global Poly-Gamma-Glutamic Acid by Manufacturers Type (Tier 1, Tier 2, and Tier 3) & (based on the Production Value of 2022)

Table 14. Manufacturers Mergers & Acquisitions, Expansion Plans)

Table 15. Vedan Biotechnology Poly-Gamma-Glutamic Acid Company Information

Table 16. Vedan Biotechnology Business Overview

Table 17. Vedan Biotechnology Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)

Table 18. Vedan Biotechnology Product Portfolio

Table 19. Vedan Biotechnology Recent Developments

Table 20. Bioleaders Poly-Gamma-Glutamic Acid Company Information

Table 21. Bioleaders Business Overview

Table 22. Bioleaders Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)

Table 23. Bioleaders Product Portfolio

Table 24. Bioleaders Recent Developments

Table 25. Ichimaru Pharcos Poly-Gamma-Glutamic Acid Company Information

- Table 26. Ichimaru Pharcos Business Overview
- Table 27. Ichimaru Pharcos Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)
- Table 28. Ichimaru Pharcos Product Portfolio
- Table 29. Ichimaru Pharcos Recent Developments
- Table 30. Shandong Freda Poly-Gamma-Glutamic Acid Company Information
- Table 31. Shandong Freda Business Overview
- Table 32. Shandong Freda Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)
- Table 33. Shandong Freda Product Portfolio
- Table 34. Shandong Freda Recent Developments
- Table 35. Nanjing Shineking Biotech Poly-Gamma-Glutamic Acid Company Information
- Table 36. Nanjing Shineking Biotech Business Overview
- Table 37. Nanjing Shineking Biotech Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)
- Table 38. Nanjing Shineking Biotech Product Portfolio
- Table 39. Nanjing Shineking Biotech Recent Developments
- Table 40. Guanghua Group Poly-Gamma-Glutamic Acid Company Information
- Table 41. Guanghua Group Business Overview
- Table 42. Guanghua Group Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)
- Table 43. Guanghua Group Product Portfolio
- Table 44. Guanghua Group Recent Developments
- Table 45. Nanjing Sai Taisi Biotechnology Poly-Gamma-Glutamic Acid Company Information
- Table 46. Nanjing Sai Taisi Biotechnology Business Overview
- Table 47. Nanjing Sai Taisi Biotechnology Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)
- Table 48. Nanjing Sai Taisi Biotechnology Product Portfolio
- Table 49. Nanjing Sai Taisi Biotechnology Recent Developments
- Table 50. Zytex Poly-Gamma-Glutamic Acid Company Information
- Table 51. Zytex Business Overview
- Table 52. Zytex Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)
- Table 53. Zytex Product Portfolio
- Table 54. Zytex Recent Developments
- Table 55. Shandong Changrui Poly-Gamma-Glutamic Acid Company Information
- Table 56. Shandong Changrui Business Overview
- Table 57. Shandong Changrui Poly-Gamma-Glutamic Acid Production Capacity (MT),

Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)

Table 58. Shandong Changrui Product Portfolio

Table 59. Shandong Changrui Recent Developments

Table 60. Shandong Taihe Biotech Poly-Gamma-Glutamic Acid Company Information

Table 61. Shandong Taihe Biotech Business Overview

Table 62. Shandong Taihe Biotech Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)

Table 63. Shandong Taihe Biotech Product Portfolio

Table 64. Shandong Taihe Biotech Recent Developments

Table 65. Lion King Biotechnology Poly-Gamma-Glutamic Acid Company Information

Table 66. Lion King Biotechnology Business Overview

Table 67. Lion King Biotechnology Poly-Gamma-Glutamic Acid Production Capacity (MT), Value (US\$ Million), Price (US\$/Ton) and Gross Margin (2018-2023)

Table 68. Lion King Biotechnology Product Portfolio

Table 69. Lion King Biotechnology Recent Developments

Table 70. Global Poly-Gamma-Glutamic Acid Production Comparison by Region: 2018 VS 2022 VS 2029 (MT)

Table 71. Global Poly-Gamma-Glutamic Acid Production by Region (2018-2023) & (MT)

Table 72. Global Poly-Gamma-Glutamic Acid Production Market Share by Region (2018-2023)

Table 73. Global Poly-Gamma-Glutamic Acid Production Forecast by Region (2024-2029) & (MT)

Table 74. Global Poly-Gamma-Glutamic Acid Production Market Share Forecast by Region (2024-2029)

Table 75. Global Poly-Gamma-Glutamic Acid Production Value Comparison by Region: 2018 VS 2022 VS 2029 (US\$ Million)

Table 76. Global Poly-Gamma-Glutamic Acid Production Value by Region (2018-2023) & (US\$ Million)

Table 77. Global Poly-Gamma-Glutamic Acid Production Value Market Share by Region (2018-2023)

Table 78. Global Poly-Gamma-Glutamic Acid Production Value Forecast by Region (2024-2029) & (US\$ Million)

Table 79. Global Poly-Gamma-Glutamic Acid Production Value Market Share Forecast by Region (2024-2029)

Table 80. Global Poly-Gamma-Glutamic Acid Market Average Price (US\$/Ton) by Region (2018-2023)

Table 81. Global Poly-Gamma-Glutamic Acid Consumption Comparison by Region: 2018 VS 2022 VS 2029 (MT)

Table 82. Global Poly-Gamma-Glutamic Acid Consumption by Region (2018-2023) &

(MT)

Table 83. Global Poly-Gamma-Glutamic Acid Consumption Market Share by Region (2018-2023)

Table 84. Global Poly-Gamma-Glutamic Acid Forecasted Consumption by Region (2024-2029) & (MT)

Table 85. Global Poly-Gamma-Glutamic Acid Forecasted Consumption Market Share by Region (2024-2029)

Table 86. North America Poly-Gamma-Glutamic Acid Consumption Growth Rate by Country: 2018 VS 2022 VS 2029 (MT)

Table 87. North America Poly-Gamma-Glutamic Acid Consumption by Country (2018-2023) & (MT)

Table 88. North America Poly-Gamma-Glutamic Acid Consumption by Country (2024-2029) & (MT)

Table 89. Europe Poly-Gamma-Glutamic Acid Consumption Growth Rate by Country: 2018 VS 2022 VS 2029 (MT)

Table 90. Europe Poly-Gamma-Glutamic Acid Consumption by Country (2018-2023) & (MT)

Table 91. Europe Poly-Gamma-Glutamic Acid Consumption by Country (2024-2029) & (MT)

Table 92. Asia Pacific Poly-Gamma-Glutamic Acid Consumption Growth Rate by Country: 2018 VS 2022 VS 2029 (MT)

Table 93. Asia Pacific Poly-Gamma-Glutamic Acid Consumption by Country (2018-2023) & (MT)

Table 94. Asia Pacific Poly-Gamma-Glutamic Acid Consumption by Country (2024-2029) & (MT)

Table 95. Latin America, Middle East & Africa Poly-Gamma-Glutamic Acid Consumption Growth Rate by Country: 2018 VS 2022 VS 2029 (MT)

Table 96. Latin America, Middle East & Africa Poly-Gamma-Glutamic Acid Consumption by Country (2018-2023) & (MT)

Table 97. Latin America, Middle East & Africa Poly-Gamma-Glutamic Acid Consumption by Country (2024-2029) & (MT)

Table 98. Global Poly-Gamma-Glutamic Acid Production by Type (2018-2023) & (MT)

Table 99. Global Poly-Gamma-Glutamic Acid Production by Type (2024-2029) & (MT)

Table 100. Global Poly-Gamma-Glutamic Acid Production Market Share by Type (2018-2023)

Table 101. Global Poly-Gamma-Glutamic Acid Production Market Share by Type (2024-2029)

Table 102. Global Poly-Gamma-Glutamic Acid Production Value by Type (2018-2023) & (US\$ Million)

Table 103. Global Poly-Gamma-Glutamic Acid Production Value by Type (2024-2029) & (US\$ Million)

Table 104. Global Poly-Gamma-Glutamic Acid Production Value Market Share by Type (2018-2023)

Table 105. Global Poly-Gamma-Glutamic Acid Production Value Market Share by Type (2024-2029)

Table 106. Global Poly-Gamma-Glutamic Acid Price by Type (2018-2023) & (US\$/Ton)

Table 107. Global Poly-Gamma-Glutamic Acid Price by Type (2024-2029) & (US\$/Ton)

Table 108. Global Poly-Gamma-Glutamic Acid Production by Application (2018-2023) & (MT)

Table 109. Global Poly-Gamma-Glutamic Acid Production by Application (2024-2029) & (MT)

Table 110. Global Poly-Gamma-Glutamic Acid Production Market Share by Application (2018-2023)

Table 111. Global Poly-Gamma-Glutamic Acid Production Market Share by Application (2024-2029)

Table 112. Global Poly-Gamma-Glutamic Acid Production Value by Application (2018-2023) & (US\$ Million)

Table 113. Global Poly-Gamma-Glutamic Acid Production Value by Application (2024-2029) & (US\$ Million)

Table 114. Global Poly-Gamma-Glutamic Acid Production Value Market Share by Application (2018-2023)

Table 115. Global Poly-Gamma-Glutamic Acid Production Value Market Share by Application (2024-2029)

Table 116. Global Poly-Gamma-Glutamic Acid Price by Application (2018-2023) & (US\$/Ton)

Table 117. Global Poly-Gamma-Glutamic Acid Price by Application (2024-2029) & (US\$/Ton)

Table 118. Key Raw Materials

Table 119. Raw Materials Key Suppliers

Table 120. Poly-Gamma-Glutamic Acid Distributors List

Table 121. Poly-Gamma-Glutamic Acid Customers List

Table 122. Poly-Gamma-Glutamic Acid Industry Trends

Table 123. Poly-Gamma-Glutamic Acid Industry Drivers

Table 124. Poly-Gamma-Glutamic Acid Industry Restraints

Table 125. Authors 12. List of This Report

List Of Figures

LIST OF FIGURES

Figure 1. Research Methodology

Figure 2. Research Process

Figure 3. Key Executives Interviewed

Figure 4. Poly-Gamma-Glutamic Acid Product Picture

Figure 5. Market Value Comparison by Type (2018 VS 2022 VS 2029) & (US\$ Million)

Figure 6. Molecular Weight Below 20,000 Product Picture

Figure 7. 700,000 Molecular Weight Product Picture

Figure 8. 1 Million Molecular Weight Product Picture

Figure 9. Above 1.5 Million Molecular Weight Product Picture

Figure 10. Fertilizer Product Picture

Figure 11. Medicines & Health Products Product Picture

Figure 12. Food & Beverages Product Picture

Figure 13. Cosmetic Product Picture

Figure 14. Others Product Picture

Figure 15. Global Poly-Gamma-Glutamic Acid Production Value (US\$ Million), 2018 VS 2022 VS 2029

Figure 16. Global Poly-Gamma-Glutamic Acid Production Value (2018-2029) & (US\$ Million)

Figure 17. Global Poly-Gamma-Glutamic Acid Production Capacity (2018-2029) & (MT)

Figure 18. Global Poly-Gamma-Glutamic Acid Production (2018-2029) & (MT)

Figure 19. Global Poly-Gamma-Glutamic Acid Average Price (US\$/Ton) & (2018-2029)

Figure 20. Global Poly-Gamma-Glutamic Acid Key Manufacturers, Manufacturing Sites & Headquarters

Figure 21. Global Poly-Gamma-Glutamic Acid Manufacturers, Date of Enter into This Industry

Figure 22. Global Top 5 and 10 Poly-Gamma-Glutamic Acid Players Market Share by Production Value in 2022

Figure 23. Manufacturers Type (Tier 1, Tier 2, and Tier 3): 2018 VS 2022

Figure 24. Global Poly-Gamma-Glutamic Acid Production Comparison by Region: 2018 VS 2022 VS 2029 (MT)

Figure 25. Global Poly-Gamma-Glutamic Acid Production Market Share by Region: 2018 VS 2022 VS 2029

Figure 26. Global Poly-Gamma-Glutamic Acid Production Value Comparison by Region: 2018 VS 2022 VS 2029 (US\$ Million)

Figure 27. Global Poly-Gamma-Glutamic Acid Production Value Market Share by

Region: 2018 VS 2022 VS 2029

Figure 28. North America Poly-Gamma-Glutamic Acid Production Value (US\$ Million) Growth Rate (2018-2029)

Figure 29. Europe Poly-Gamma-Glutamic Acid Production Value (US\$ Million) Growth Rate (2018-2029)

Figure 30. China Poly-Gamma-Glutamic Acid Production Value (US\$ Million) Growth Rate (2018-2029)

Figure 31. Japan Poly-Gamma-Glutamic Acid Production Value (US\$ Million) Growth Rate (2018-2029)

Figure 32. Global Poly-Gamma-Glutamic Acid Consumption Comparison by Region: 2018 VS 2022 VS 2029 (MT)

Figure 33. Global Poly-Gamma-Glutamic Acid Consumption Market Share by Region: 2018 VS 2022 VS 2029

Figure 34. North America Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 35. North America Poly-Gamma-Glutamic Acid Consumption Market Share by Country (2018-2029)

Figure 36. United States Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 37. Canada Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 38. Europe Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 39. Europe Poly-Gamma-Glutamic Acid Consumption Market Share by Country (2018-2029)

Figure 40. Germany Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 41. France Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 42. U.K. Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 43. Italy Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 44. Netherlands Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 45. Asia Pacific Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 46. Asia Pacific Poly-Gamma-Glutamic Acid Consumption Market Share by Country (2018-2029)

Figure 47. China Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 48. Japan Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 49. South Korea Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 50. China Taiwan Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 51. Southeast Asia Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 52. India Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 53. Australia Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 54. Latin America, Middle East & Africa Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 55. Latin America, Middle East & Africa Poly-Gamma-Glutamic Acid Consumption Market Share by Country (2018-2029)

Figure 56. Mexico Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 57. Brazil Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 58. Turkey Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 59. GCC Countries Poly-Gamma-Glutamic Acid Consumption and Growth Rate (2018-2029) & (MT)

Figure 60. Global Poly-Gamma-Glutamic Acid Production Market Share by Type (2018-2029)

Figure 61. Global Poly-Gamma-Glutamic Acid Production Value Market Share by Type (2018-2029)

Figure 62. Global Poly-Gamma-Glutamic Acid Price (US\$/Ton) by Type (2018-2029)

Figure 63. Global Poly-Gamma-Glutamic Acid Production Market Share by Application (2018-2029)

Figure 64. Global Poly-Gamma-Glutamic Acid Production Value Market Share by Application (2018-2029)

Figure 65. Global Poly-Gamma-Glutamic Acid Price (US\$/Ton) by Application (2018-2029)

Figure 66. Poly-Gamma-Glutamic Acid Value Chain

Figure 67. Poly-Gamma-Glutamic Acid Production Mode & Process

Figure 68. Direct Comparison with Distribution Share

Figure 69. Distributors Profiles

Figure 70. Poly-Gamma-Glutamic Acid Industry Opportunities and Challenges

I would like to order

Product name: Poly-Gamma-Glutamic Acid Industry Research Report 2023

Product link: <https://marketpublishers.com/r/P81D5186AE66EN.html>

Price: US\$ 2,950.00 (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/P81D5186AE66EN.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