

Global Poly-gamma-glutamic Acid Market Growth 2025-2031

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Abstracts

The global Poly-gamma-glutamic Acid market size is predicted to grow from US\$ 492 million in 2025 to US\$ 767 million in 2031; it is expected to grow at a CAGR of 7.7% from 2025 to 2031.

The impact of the latest U.S. tariff measures and the corresponding policy responses from countries worldwide on market competitiveness, regional economic performance, and supply chain configurations will be comprehensively evaluated in this report.

Poly-gamma-glutamic acid (γ -PGA) is a naturally occurring, biodegradable, and water-soluble biopolymer composed of glutamic acid monomers linked through γ -amide bonds. Unlike typical proteins that are linked via α -peptide bonds, γ -PGA features γ -linkages between the amino group of one glutamic acid and the carboxyl group on the side chain of another. It is primarily produced through microbial fermentation, especially by *Bacillus subtilis* and related strains.

Global key players of Poly-Gamma-Glutamic Acid include Nanjing Shineking Biotech, Vedan Biotechnology, Shandong Changrui, Bloomage Biotech, Shandong Freda, etc. The top five players hold a share about 40%. In terms of product type, 700,000 Molecular Weight is the largest segment, occupied for a share of about 44%, and in terms of application, Fertilizer has a share about 33 percent.

As a bio-based material, the application prospect of polyglutamic acid is promising. Attracted by the good market prospect, the number of companies deploying this market continues to increase. As far as the Chinese market is concerned, there are more than 20 polyglutamic acid production enterprises with relatively large production capacity, but due to the limitation of the production process, the actual output of polyglutamic acid is

relatively low. As a biodegradable green polymer material, polyglutamic acid has attracted more and more attention. Whether it is inside the human body or in the external environment, its final catabolism product is glutamic acid, which has no toxic and side effects on the human body. Polyglutamic acid has shown superiority in many fields. In the future, driven by supply-side reforms and green environmental protection policies, downstream pharmaceuticals, cosmetics, agriculture and other fields need to continuously upgrade their industrial structures, and the market demand for polyglutamic acid will continue to grow accordingly.

LP Information, Inc. (LPI) ' newest research report, the "Poly-gamma-glutamic Acid Industry Forecast" looks at past sales and reviews total world Poly-gamma-glutamic Acid sales in 2024, providing a comprehensive analysis by region and market sector of projected Poly-gamma-glutamic Acid sales for 2025 through 2031. With Poly-gamma-glutamic Acid sales broken down by region, market sector and sub-sector, this report provides a detailed analysis in US\$ millions of the world Poly-gamma-glutamic Acid industry.

This Insight Report provides a comprehensive analysis of the global Poly-gamma-glutamic Acid landscape and highlights key trends related to product segmentation, company formation, revenue, and market share, latest development, and M&A activity. This report also analyzes the strategies of leading global companies with a focus on Poly-gamma-glutamic Acid portfolios and capabilities, market entry strategies, market positions, and geographic footprints, to better understand these firms' unique position in an accelerating global Poly-gamma-glutamic Acid market.

This Insight Report evaluates the key market trends, drivers, and affecting factors shaping the global outlook for Poly-gamma-glutamic Acid and breaks down the forecast by Type, by Application, geography, and market size to highlight emerging pockets of opportunity. With a transparent methodology based on hundreds of bottom-up qualitative and quantitative market inputs, this study forecast offers a highly nuanced view of the current state and future trajectory in the global Poly-gamma-glutamic Acid.

This report presents a comprehensive overview, market shares, and growth opportunities of Poly-gamma-glutamic Acid market by product type, application, key manufacturers and key regions and countries.

Segmentation by Type:

Molecular Weight Below 20,000

700,000 Molecular Weight

1 million Molecular Weight

Above 1.5 million Molecular Weight

Segmentation by Application:

Fertilizer

Medicines & Health Products

Food & Drinks

Cosmetic

Others

This report also splits the market by region:

Americas

United States

Canada

Mexico

Brazil

APAC

China

Japan

Korea

Southeast Asia

India

Australia

Europe

Germany

France

UK

Italy

Russia

Middle East & Africa

Egypt

South Africa

Israel

Turkey

GCC Countries

The below companies that are profiled have been selected based on inputs gathered from primary experts and analysing the company's coverage, product portfolio, its market penetration.

Vedan Biotechnology

Bioleaders

Ichimaru Pharcos

Toyobo

Shandong Freda

Nanjing Shineking Biotech

Bloomage Biotech

Guanghua Group

Nanjing Sai Taisi Biotechnology

Zytex

Shandong Changrui

Shandong Taihe Biotech

Lion King Biotechnology

Guangdong Sunge Bioscience

Hefei Hechen

Key Questions Addressed in this Report

What is the 10-year outlook for the global Poly-gamma-glutamic Acid market?

What factors are driving Poly-gamma-glutamic Acid market growth, globally and by region?

Which technologies are poised for the fastest growth by market and region?

How do Poly-gamma-glutamic Acid market opportunities vary by end market size?

How does Poly-gamma-glutamic Acid break out by Type, by Application?

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