

Global Gamma-Polyglutamic Acid Competitive Landscape Professional Research Report 2025

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Abstracts

Market Overview

According to DIResearch's in-depth investigation and research, the global Gamma-Polyglutamic Acid market size will reach 542.68 Million USD in 2025 and is projected to reach 891.58 Million USD by 2032, with a CAGR of 7.35% (2025-2032). Notably, the China Gamma-Polyglutamic Acid market has changed rapidly in the past few years. By 2025, China's market size is expected to be Million USD, representing approximately % of the global market share.

Research Summary

Gamma-polyglutamic acid (γ -PGA) is a naturally occurring biopolymer composed of repeating units of glutamic acid linked by amide bonds. Unlike other forms of polyglutamic acid, such as alpha- and beta-PGA, which are water-insoluble, gamma-PGA is water-soluble and has unique properties that make it valuable in various industrial and biomedical applications. It is produced by certain strains of bacteria, primarily *Bacillus subtilis*, through fermentation processes. Gamma-PGA exhibits excellent biocompatibility, biodegradability, and water-retaining capacity, making it useful in skincare products, wound healing applications, and drug delivery systems. It also has applications in food and agriculture, where it can act as a thickening agent, emulsifier, or biodegradable film for crop protection. Additionally, gamma-PGA has potential in environmental remediation and as a material for biodegradable plastics due to its eco-friendly properties.

The major global manufacturers of Gamma-Polyglutamic Acid include Vedan Biotechnology, Lion King Biotechnology, Nanjing Shineking Biotech, Guanghua Group,

Nanjing Sai Taisi Biotechnology, Shandong Freda, Shandong Taihe Biotech, Ichimaru Pharcos, Shandong Changrui, Bioleaders, Zytex, etc. The global players competition landscape in this report is divided into three tiers. The first tier comprises global leading enterprises that command a substantial market share, hold a dominant industry position, possess strong competitiveness and influence, and generate significant revenue. The second tier includes companies with a notable market presence and reputation; these firms actively follow industry leaders in product, service, or technological innovation and maintain a moderate revenue scale. The third tier consists of smaller companies with limited market share and lower brand recognition, primarily focused on local markets and generating comparatively lower revenue.

This report studies the market size, price trends and future development prospects of Gamma-Polyglutamic Acid. Focus on analysing the market share, product portfolio, prices, sales, revenue and gross profit margin of global major manufacturers, as well as the market status and trends of different product types and applications in the global Gamma-Polyglutamic Acid market. The report data covers historical data from 2020 to 2024, based year in 2025 and forecast data from 2026 to 2032.

The regions and countries in the report include North America, Europe, China, APAC (excl. China), Latin America and Middle East and Africa, covering the Gamma-Polyglutamic Acid market conditions and future development trends of key regions and countries, combined with industry-related policies and the latest technological developments, analyze the development characteristics of Gamma-Polyglutamic Acid industries in various regions and countries, help companies understand the development characteristics of each region, help companies formulate business strategies, and achieve the ultimate goal of the company's global development strategy.

The data sources of this report mainly include the National Bureau of Statistics, customs databases, industry associations, corporate financial reports, third-party databases, etc. Among them, macroeconomic data mainly comes from the National Bureau of Statistics, International Economic Research Organization; industry statistical data mainly come from industry associations; company data mainly comes from interviews, public information collection, third-party reliable databases, and price data mainly comes from various markets monitoring database.

Global Key Manufacturers of Gamma-Polyglutamic Acid Include:

Vedan Biotechnology

Lion King Biotechnology

Nanjing Shineking Biotech

Guanghua Group

Nanjing Sai Taisi Biotechnology

Shandong Freda

Shandong Taihe Biotech

Ichimaru Pharcos

Shandong Changrui

Bioleaders

Zytex

Gamma-Polyglutamic Acid Product Segment Include:

Molecular Weight Below 20,000

700,000 Molecular Weight

1 million Molecular Weight

Above 1.5 million Molecular Weight

Gamma-Polyglutamic Acid Product Application Include:

Fertilizer

Medicines & Health Products

Food & Drinks

Cosmetic

Others

Chapter Scope

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