

# **Global Glucaric Acid Market Size study, by Product (Pure Glucaric Acid, D-Glucaric Acid-1,4-lactone), by Application (Food Ingredients, Detergents, Corrosion Inhibitors), and Regional Forecasts 2022-2032**

<https://marketpublishers.com/r/GDFE9019E7D7EN.html>

Date: April 2025

Pages: 285

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

ID: GDFE9019E7D7EN

## **Abstracts**

The Global Glucaric Acid Market is valued at approximately USD 1047.39 million in 2023 and is expected to grow at a dynamic compound annual growth rate of 8.94% over the forecast period from 2024 to 2032. Glucaric acid, a bio-based compound primarily derived from glucose through a catalytic oxidation process, has rapidly garnered attention as a sustainable, non-toxic alternative to conventional chemicals across a range of industrial and commercial applications. As the demand for eco-friendly, biodegradable ingredients intensifies, glucaric acid's role in revolutionizing everything from food safety to household cleaning products is being acknowledged worldwide. With its multifunctional properties—including chelation, corrosion inhibition, and emulsification—this naturally occurring sugar acid is emerging as a pivotal ingredient in next-gen formulations tailored to meet both environmental standards and performance expectations.

The expansion of the glucaric acid market is being underpinned by several interlocking trends reshaping the global chemical and consumer product landscape. Notably, the surge in demand for phosphate-free detergents and biodegradable cleaners is pushing manufacturers to explore greener alternatives—glucaric acid being a top contender due to its excellent cleaning and water-softening attributes. Moreover, its rising adoption as a food additive, particularly as a calcium D-glucarate derivative with detoxification and cancer-preventive benefits, has helped open doors to premium health and nutrition markets. Concurrently, growing awareness among industrial buyers regarding the need to minimize chemical discharge and toxicity levels is reinforcing its importance in corrosion inhibitor applications, especially in water treatment and oil & gas pipelines.

However, despite its promising potential, the glucaric acid industry encounters a few key constraints that could temper growth momentum. High production costs, limited commercial-scale production facilities, and technical challenges linked to yield optimization remain critical barriers. Moreover, regulatory approvals and the sluggish transition from petrochemical-based compounds to their green counterparts in some regions slow down the pace of mainstream adoption. Nonetheless, increased investment in biotechnology and bio-refinery infrastructure is anticipated to lower costs and improve process scalability, while strategic alliances between bio-based chemical innovators and end-use sectors are laying the foundation for wider application and demand.

In terms of regional outlook, North America leads the global glucaric acid market, driven by a robust ecosystem of green chemistry firms, regulatory support for sustainable production practices, and early consumer acceptance of bio-based ingredients. Europe follows closely, with strong emphasis on environmental responsibility and circular economy initiatives creating fertile ground for innovation and market penetration. Meanwhile, the Asia Pacific region is poised to witness the highest growth rate during the forecast period, propelled by rising industrial output, increasing environmental regulations, and growing demand for safer and more sustainable chemicals in densely populated nations like China and India. Latin America and the Middle East & Africa are gradually catching up, supported by infrastructure development and shifting regulatory priorities.

Major market player included in this report are:

Kalion Inc.

Rennovia Inc.

Rivertop Renewables

Zhejiang Weibo Biotechnology Co., Ltd.

Haihang Industry Co., Ltd.

AK Scientific Inc.

Carbosynth Ltd.

Alfa Aesar (Thermo Fisher Scientific)

Cayman Chemical Company

Chemos GmbH

Oakwood Products Inc.

Arkema Group

Merck KGaA

SimSon Pharma Limited

Tokyo Chemical Industry Co., Ltd.

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

#### By Product

Pure Glucaric Acid

D-Glucaric Acid-1,4-lactone

#### By Application

Food Ingredients

Detergents

Corrosion Inhibitors

#### 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

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 GLUCARIC ACID MARKET EXECUTIVE SUMMARY

- 1.1. Global Glucaric Acid Market Size & Forecast (2022–2032)
- 1.2. Regional Summary
- 1.3. Segmental Summary
  - 1.3.1. By Product
  - 1.3.2. By Application
- 1.4. Key Trends
- 1.5. Recession Impact
- 1.6. Analyst Recommendation & Conclusion

### CHAPTER 2. GLOBAL GLUCARIC ACID 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 GLUCARIC ACID MARKET DYNAMICS

- 3.1. Market Drivers

- 3.1.1.?Growing Demand for Phosphate free Detergents
- 3.1.2.?Rising Adoption in Food Ingredients and Nutraceuticals
- 3.1.3.?Increased Industrial Need for Eco friendly Corrosion Inhibitors
- 3.2.?Market Challenges
  - 3.2.1.?High Production Costs and Limited Commercial scale Capacity
  - 3.2.2.?Regulatory Approval Delays for Bio based Chemicals
  - 3.2.3.?Competition from Petrochemical derived Alternatives
- 3.3.?Market Opportunities
  - 3.3.1.?Expansion in Biodegradable Cleaning Products
  - 3.3.2.?Growth in Clean label Food and Beverage Segment
  - 3.3.3.?Industrial Water Treatment and Oil & Gas Corrosion Control Applications

## **CHAPTER 4.?GLOBAL GLUCARIC ACID 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 GLUCARIC ACID MARKET SIZE?&?FORECASTS BY PRODUCT?2022–2032**

- 5.1.?Segment Dashboard

## 5.2. Global Glucaric Acid Market: Product Revenue Trend Analysis, 2022–2032 (USD Million)

### 5.2.1. Pure Glucaric Acid

### 5.2.2. D Glucaric Acid 1,4 lactone

## **CHAPTER 6. GLOBAL GLUCARIC ACID MARKET SIZE & FORECASTS BY APPLICATION 2022–2032**

### 6.1. Segment Dashboard

## 6.2. Global Glucaric Acid Market: Application Revenue Trend Analysis, 2022–2032 (USD Million)

### 6.2.1. Food Ingredients

### 6.2.2. Detergents

### 6.2.3. Corrosion Inhibitors

## **CHAPTER 7. GLOBAL GLUCARIC ACID MARKET SIZE & FORECASTS BY REGION 2022–2032**

### 7.1. North America Glucaric Acid Market

#### 7.1.1. U.S. Glucaric Acid Market

##### 7.1.1.1. Product breakdown size & forecasts, 2022–2032

##### 7.1.1.2. Application breakdown size & forecasts, 2022–2032

#### 7.1.2. Canada Glucaric Acid Market

### 7.2. Europe Glucaric Acid Market

#### 7.2.1. UK Glucaric Acid Market

#### 7.2.2. Germany Glucaric Acid Market

#### 7.2.3. France Glucaric Acid Market

#### 7.2.4. Spain Glucaric Acid Market

#### 7.2.5. Italy Glucaric Acid Market

#### 7.2.6. Rest of Europe Glucaric Acid Market

### 7.3. Asia Pacific Glucaric Acid Market

#### 7.3.1. China Glucaric Acid Market

#### 7.3.2. India Glucaric Acid Market

#### 7.3.3. Japan Glucaric Acid Market

#### 7.3.4. Australia Glucaric Acid Market

#### 7.3.5. South Korea Glucaric Acid Market

#### 7.3.6. Rest of Asia Pacific Glucaric Acid Market

### 7.4. Latin America Glucaric Acid Market

#### 7.4.1. Brazil Glucaric Acid Market



- 7.4.2. Mexico Glucaric Acid Market
- 7.4.3. Rest of Latin America Glucaric Acid Market
- 7.5. Middle East & Africa Glucaric Acid Market
  - 7.5.1. Saudi Arabia Glucaric Acid Market
  - 7.5.2. South Africa Glucaric Acid Market
  - 7.5.3. Rest of Middle East & Africa Glucaric Acid Market

## **CHAPTER 8. COMPETITIVE INTELLIGENCE**

- 8.1. Key Company SWOT Analysis
  - 8.1.1. Kalion Inc.
  - 8.1.2. Rennovia Inc.
  - 8.1.3. Rivertop Renewables
- 8.2. Top Market Strategies
- 8.3. Company Profiles
  - 8.3.1. Kalion Inc.
    - 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. Rennovia Inc.
  - 8.3.3. Rivertop Renewables
  - 8.3.4. Zhejiang Weibo Biotechnology Co., Ltd.
  - 8.3.5. Haihang Industry Co., Ltd.
  - 8.3.6. AK Scientific Inc.
  - 8.3.7. Carbosynth Ltd.
  - 8.3.8. Alfa Aesar (Thermo Fisher Scientific)
  - 8.3.9. Cayman Chemical Company
  - 8.3.10. Chemos GmbH
  - 8.3.11. Oakwood Products Inc.
  - 8.3.12. Arkema Group
  - 8.3.13. Merck KGaA
  - 8.3.14. SimSon Pharma Limited
  - 8.3.15. Tokyo Chemical Industry Co., Ltd.

## **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

## List Of Tables

### LIST OF TABLES

TABLE?1.?Global Glucaric Acid market, report scope

TABLE?2.?Global Glucaric Acid market estimates?&?forecasts by Region 2022–2032 (USD Million)

TABLE?3.?Global Glucaric Acid market estimates?&?forecasts by Product 2022–2032 (USD Million)

TABLE?4.?Global Glucaric Acid market estimates?&?forecasts by Application 2022–2032 (USD Million)

TABLE?5.?Global Glucaric Acid market by segment, estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?6.?Global Glucaric Acid market by region, estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?7.?Global Glucaric Acid market by segment, estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?8.?Global Glucaric Acid market by region, estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?9.?Global Glucaric Acid market by segment, estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?10.?Global Glucaric Acid market by region, estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?11.?Global Glucaric Acid market by segment, estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?12.?Global Glucaric Acid market by region, estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?13.?Global Glucaric Acid market by segment, estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?14.?U.S. Glucaric Acid market estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?15.?U.S. Glucaric Acid market estimates?&?forecasts by segment 2022–2032 (USD Million)

TABLE?16.?Canada Glucaric Acid market estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?17.?Canada Glucaric Acid market estimates?&?forecasts by segment 2022–2032 (USD Million)

TABLE?18.?Europe Glucaric Acid market estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?19.?Asia Pacific Glucaric Acid market estimates?&?forecasts, 2022–2032 (USD Million)

TABLE?20.?Latin America Glucaric Acid market estimates?&?forecasts, 2022–2032 (USD Million)

## I would like to order

Product name: Global Glucaric Acid Market Size study, by Product (Pure Glucaric Acid, D-Glucaric Acid-1,4-lactone), by Application (Food Ingredients, Detergents, Corrosion Inhibitors), and Regional Forecasts 2022-2032

Product link: <https://marketpublishers.com/r/GDFE9019E7D7EN.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](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GDFE9019E7D7EN.html>