

Biological Catalyst Market Outlook 2025-2034: Market Share, and Growth Analysis By Product Type(Enzymes, Microbial Cells, Antibodies),By Technology, By Application, By End User

<https://marketpublishers.com/r/B2D147AB4D0BEN.html>

Date: July 2025

Pages: 150

Price: US\$ 3,950.00 (Single User License)

ID: B2D147AB4D0BEN

Abstracts

The global Biological Catalyst Market size is valued at USD 8 billion in 2024 and is projected to reach USD 12.8 billion by 2032, registering a compound annual growth rate (CAGR) of 6.05% over the forecast period.

The biological catalyst market is witnessing stable growth driven by rising demand for enzymes and biocatalysts in pharmaceuticals, food processing, biofuels, and environmental applications. Biological catalysts enhance reaction rates under mild conditions with high specificity and reduced by-products compared to chemical catalysts. Manufacturers are focusing on enzyme immobilisation technologies, thermostable enzyme development, and recombinant enzyme production for cost-effective scalability. Growth is supported by expanding biopharmaceutical manufacturing, increasing enzymatic food processing, and demand for green chemistry solutions in industrial processes. Challenges include enzyme stability under industrial conditions, regulatory approvals for new applications, and production cost constraints for large-scale use. Recent developments include Novozymes launching thermostable enzymes for biomass conversion, BASF introducing immobilised enzyme systems for chemical synthesis, and Codexis enhancing enzyme engineering platforms for pharmaceutical biocatalysis.

Major trends include development of thermostable and immobilised enzymes for industrial biocatalysis with enhanced stability and reusability.

Drivers are rising biopharmaceutical and food processing enzyme demands, increasing

adoption of green chemistry solutions, and biofuel production using enzymatic processes.

Challenges include enzyme stability limitations under harsh conditions, regulatory hurdles for new biocatalytic applications, and production cost constraints for industrial scale-up.

Companies focus on enzyme engineering for performance enhancement, developing immobilisation technologies for reusability, and expanding recombinant production for cost reduction.

Recent developments include Novozymes launching thermostable biomass enzymes, BASF introducing immobilised enzyme systems, and Codexis enhancing enzyme engineering platforms for pharmaceuticals.

Biological Catalyst Market Size Data, Trends, Growth Opportunities, and Restraining Factors

This comprehensive Biological Catalyst market report delivers updated market size estimates from 2024 to 2034, offering in-depth analysis of the latest Biological Catalyst market trends, short-term and long-term growth drivers, competitive landscape, and new business opportunities. The report presents growth forecasts across key Biological Catalyst types, applications, and major segments, alongside detailed insights into the current Biological Catalyst market scenario to support companies in formulating effective market strategies.

The Biological Catalyst market outlook thoroughly examines the impact of ongoing supply chain disruptions and geopolitical issues worldwide. Factors such as trade tariffs, regulatory restrictions, production losses, and the emergence of alternatives or substitutes are carefully considered in the Biological Catalyst market size projections. Additionally, the analysis highlights the effects of inflation and correlates past economic downturns with current Biological Catalyst market trends, providing actionable intelligence for stakeholders to navigate the evolving Biological Catalyst business environment with precision.

Biological Catalyst Market Competition, Intelligence, Key Players, winning strategies to 2034

The 2025 Biological Catalyst Market Research Report identifies winning strategies for

companies to register increased sales and improve market share.

Opinions from senior executives from leading companies in the Biological Catalyst market are imbibed thoroughly and the Biological Catalyst industry expert predictions on the economic downturn, technological advancements in the Biological Catalyst market, and customized strategies specific to a product and geography are mentioned.

The Biological Catalyst market report is a source of comprehensive data and analysis of the industry, helping businesses to make informed decisions and stay ahead of the competition. The Biological Catalyst market study assists investors in analyzing On Biological Catalyst business prospects by region, key countries, and top companies' information to channel their investments.

The report provides insights into consumer behavior and preferences, including their buying patterns, brand loyalty, and factors influencing their purchasing decisions. It also includes an analysis of the regulatory environment and its impact on the Biological Catalyst industry. Shifting consumer demand despite declining GDP and burgeoning interest rates to control surging inflation is well detailed.

What's Included in the Report

Global Biological Catalyst market size and growth projections, 2024- 2034

North America Biological Catalyst market size and growth forecasts, 2024-2034 (United States, Canada, Mexico)

Europe market size and growth forecasts, 2024- 2034 (Germany, France, United Kingdom, Italy, Spain)

Asia-Pacific Biological Catalyst market size and growth forecasts, 2024- 2034 (China, India, Japan, South Korea, Australia)

Middle East Africa Biological Catalyst market size and growth estimate, 2024-2034 (Middle East, Africa)

South and Central America Biological Catalyst market size and growth outlook, 2024- 2034 (Brazil, Argentina, Chile)

Biological Catalyst market size, share and CAGR of key products, applications,

and other verticals, 2024- 2034

Short- and long-term Biological Catalyst market trends, drivers, challenges, and opportunities

Biological Catalyst market insights, Porter's Five Forces analysis

Profiles of 5 leading companies in the industry- overview, key strategies, financials, product portfolio and SWOT analysis

Latest market news and developments

Key Questions Answered in This Report :

What is the current Biological Catalyst market size at global, regional, and country levels?

What is the market penetration of different types, Applications, processes/technologies, and distribution/sales channels of the Biological Catalyst market?

What will be the impact of economic slowdown/recission on Biological Catalyst demand/sales?

How has the global Biological Catalyst market evolved in past years and what will be the future trajectory?

What is the impact of growing inflation, Russia-Ukraine war on the Biological Catalyst market forecast?

What are the Supply chain challenges for Biological Catalyst?

What are the potential regional Biological Catalyst markets to invest in?

What is the product evolution and high-performing products to focus in the Biological Catalyst market?

What are the key driving factors and opportunities in the industry?

Who are the key players in Biological Catalyst market and what is the degree of competition/Biological Catalyst market share?

What is the market structure /Biological Catalyst Market competitive Intelligence?

Available Customizations

The standard syndicate report is designed to serve the common interests of Biological Catalyst Market players across the value chain, and include selective data and analysis from entire research findings as per the scope and price of the publication.

However, to precisely match the specific research requirements of individual clients, we offer several customization options to include the data and analysis of interest in the final deliverable.

Some of the customization requests are as mentioned below –

Segmentation of choice – Our clients can seek customization to modify/add a market division for types/applications/end-uses/processes of their choice.

Biological Catalyst Pricing and Margins Across the Supply Chain, Biological Catalyst Price Analysis / International Trade Data / Import-Export Analysis,

Supply Chain Analysis, Supply–Demand Gap Analysis, PESTLE Analysis, Macro-Economic Analysis, and other Biological Catalyst market analytics

Processing and manufacturing requirements, Patent Analysis, Technology Trends, and Product Innovations

Further, the client can seek customization to break down geographies as per their requirements for specific countries/country groups such as South East Asia, Central Asia, Emerging and Developing Asia, Western Europe, Eastern Europe, Benelux, Emerging and Developing Europe, Nordic countries, North Africa, Sub-Saharan Africa, Caribbean, The Middle East and North Africa (MENA), Gulf Cooperation Council (GCC) or any other.

Capital Requirements, Income Projections, Profit Forecasts, and other parameters to prepare a detailed project report to present to Banks/Investment Agencies.

Customization of up to 10% of the content can be done without any additional charges.

Additional support

All the data presented in tables and charts of the report is provided in a separate Excel document

Print authentication allowed on purchase of online versions

10% free customization to include any specific data/analysis to match the requirement

7 days of analyst support

The report will be updated to the latest month and delivered within 3 business days

Biological Catalyst Market Segmentation

By Product

Enzymes

Microbial Cells

Antibodies

By Application

Biotechnology

Pharmaceuticals

Agriculture

Food and Beverage

By End User

Academic and Research Institutes

Pharmaceutical Companies

Biopharmaceutical Companies

By Technology

Biocatalysis

Hybrid Technology

By Geography

North America (USA, Canada, Mexico)

Europe (Germany, UK, France, Spain, Italy, Rest of Europe)

Asia-Pacific (China, India, Japan, Australia, Vietnam, Rest of APAC)

The Middle East and Africa (Middle East, Africa)

South and Central America (Brazil, Argentina, Rest of SCA)

Top Companies Analysed

Novozymes A/S

DuPont de Nemours, Inc. (IFF - Genencor Division)

BASF SE

DSM-Firmenich

AB Enzymes GmbH

Chr. Hansen Holding A/S

Advanced Enzyme Technologies Ltd.

Biocatalysts Ltd.

Amano Enzyme Inc.

Codexis, Inc.

Dyadic International, Inc.

Enzymatica AB

SABEU GmbH & Co. KG

Specialty Enzymes & Probiotics

Enzyme Supplies Ltd.

Contents

1. TABLE OF CONTENTS

- 1.1 List of Tables
- 1.2 List of Figures

2. BIOLOGICAL CATALYST MARKET LATEST TRENDS, DRIVERS AND CHALLENGES, 2024- 2034

- 2.1 Biological Catalyst Market Overview
- 2.2 Market Strategies of Leading Biological Catalyst Companies
- 2.3 Biological Catalyst Market Insights, 2024- 2034
 - 2.3.1 Leading Biological Catalyst Types, 2024- 2034
 - 2.3.2 Leading Biological Catalyst End-User industries, 2024- 2034
 - 2.3.3 Fast-Growing countries for Biological Catalyst sales, 2024- 2034
- 2.4 Biological Catalyst Market Drivers and Restraints
 - 2.4.1 Biological Catalyst Demand Drivers to 2034
 - 2.4.2 Biological Catalyst Challenges to 2034
- 2.5 Biological Catalyst Market- Five Forces Analysis
 - 2.5.1 Biological Catalyst Industry Attractiveness Index, 2024
 - 2.5.2 Threat of New Entrants
 - 2.5.3 Bargaining Power of Suppliers
 - 2.5.4 Bargaining Power of Buyers
 - 2.5.5 Intensity of Competitive Rivalry
 - 2.5.6 Threat of Substitutes

3. GLOBAL BIOLOGICAL CATALYST MARKET VALUE, MARKET SHARE, AND FORECAST TO 2034

- 3.1 Global Biological Catalyst Market Overview, 2024
- 3.2 Global Biological Catalyst Market Revenue and Forecast, 2024- 2034 (US\$ Million)
- 3.3 Global Biological Catalyst Market Size and Share Outlook By Product, 2024- 2034
- 3.4 Global Biological Catalyst Market Size and Share Outlook By Application, 2024- 2034
- 3.5 Global Biological Catalyst Market Size and Share Outlook By End User, 2024- 2034
- 3.6 Global Biological Catalyst Market Size and Share Outlook By Technology, 2024- 2034
- 3.7 Global Biological Catalyst Market Size and Share Outlook by Region, 2024- 2034

4. ASIA PACIFIC BIOLOGICAL CATALYST MARKET VALUE, MARKET SHARE AND FORECAST TO 2034

4.1 Asia Pacific Biological Catalyst Market Overview, 2024

4.2 Asia Pacific Biological Catalyst Market Revenue and Forecast, 2024- 2034 (US\$ Million)

4.3 Asia Pacific Biological Catalyst Market Size and Share Outlook By Product, 2024-2034

4.4 Asia Pacific Biological Catalyst Market Size and Share Outlook By Application, 2024- 2034

4.5 Asia Pacific Biological Catalyst Market Size and Share Outlook By End User, 2024-2034

4.6 Asia Pacific Biological Catalyst Market Size and Share Outlook By Technology, 2024- 2034

4.7 Asia Pacific Biological Catalyst Market Size and Share Outlook by Country, 2024-2034

5. EUROPE BIOLOGICAL CATALYST MARKET VALUE, MARKET SHARE, AND FORECAST TO 2034

5.1 Europe Biological Catalyst Market Overview, 2024

5.2 Europe Biological Catalyst Market Revenue and Forecast, 2024- 2034 (US\$ Million)

5.3 Europe Biological Catalyst Market Size and Share Outlook By Product, 2024- 2034

5.4 Europe Biological Catalyst Market Size and Share Outlook By Application, 2024-2034

5.5 Europe Biological Catalyst Market Size and Share Outlook By End User, 2024-2034

5.6 Europe Biological Catalyst Market Size and Share Outlook By Technology, 2024-2034

5.7 Europe Biological Catalyst Market Size and Share Outlook by Country, 2024- 2034

6. NORTH AMERICA BIOLOGICAL CATALYST MARKET VALUE, MARKET SHARE AND FORECAST TO 2034

6.1 North America Biological Catalyst Market Overview, 2024

6.2 North America Biological Catalyst Market Revenue and Forecast, 2024- 2034 (US\$ Million)

6.3 North America Biological Catalyst Market Size and Share Outlook By Product, 2024-

2034

6.4 North America Biological Catalyst Market Size and Share Outlook By Application, 2024- 2034

6.5 North America Biological Catalyst Market Size and Share Outlook By End User, 2024- 2034

6.6 North America Biological Catalyst Market Size and Share Outlook By Technology, 2024- 2034

6.7 North America Biological Catalyst Market Size and Share Outlook by Country, 2024- 2034

7. SOUTH AND CENTRAL AMERICA BIOLOGICAL CATALYST MARKET VALUE, MARKET SHARE AND FORECAST TO 2034

7.1 South and Central America Biological Catalyst Market Overview, 2024

7.2 South and Central America Biological Catalyst Market Revenue and Forecast, 2024- 2034 (US\$ Million)

7.3 South and Central America Biological Catalyst Market Size and Share Outlook By Product, 2024- 2034

7.4 South and Central America Biological Catalyst Market Size and Share Outlook By Application, 2024- 2034

7.5 South and Central America Biological Catalyst Market Size and Share Outlook By End User, 2024- 2034

7.6 South and Central America Biological Catalyst Market Size and Share Outlook By Technology, 2024- 2034

7.7 South and Central America Biological Catalyst Market Size and Share Outlook by Country, 2024- 2034

8. MIDDLE EAST AFRICA BIOLOGICAL CATALYST MARKET VALUE, MARKET SHARE AND FORECAST TO 2034

8.1 Middle East Africa Biological Catalyst Market Overview, 2024

8.2 Middle East and Africa Biological Catalyst Market Revenue and Forecast, 2024- 2034 (US\$ Million)

8.3 Middle East Africa Biological Catalyst Market Size and Share Outlook By Product, 2024- 2034

8.4 Middle East Africa Biological Catalyst Market Size and Share Outlook By Application, 2024- 2034

8.5 Middle East Africa Biological Catalyst Market Size and Share Outlook By End User, 2024- 2034

8.6 Middle East Africa Biological Catalyst Market Size and Share Outlook By Technology, 2024- 2034

8.7 Middle East Africa Biological Catalyst Market Size and Share Outlook by Country, 2024- 2034

9. BIOLOGICAL CATALYST MARKET STRUCTURE

9.1 Key Players

9.2 Biological Catalyst Companies - Key Strategies and Financial Analysis

9.2.1 Snapshot

9.2.3 Business Description

9.2.4 Products and Services

9.2.5 Financial Analysis

10. BIOLOGICAL CATALYST INDUSTRY RECENT DEVELOPMENTS

11 APPENDIX

11.1 Publisher Expertise

11.2 Research Methodology

11.3 Annual Subscription Plans

11.4 Contact Information

I would like to order

Product name: Biological Catalyst Market Outlook 2025-2034: Market Share, and Growth Analysis By Product Type(Enzymes, Microbial Cells, Antibodies),By Technology, By Application, By End User

Product link: <https://marketpublishers.com/r/B2D147AB4D0BEN.html>

Price: US\$ 3,950.00 (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/B2D147AB4D0BEN.html>