

Enzymes Market Type (Protease, Carbohydrase, Lipase, Polymerase and Nuclease, and Other Types), Source (Microorganisms, Plants, and Animals), Reaction Type (Hydrolase, Oxidoreductase, Transferase, Lyase, and Other Reaction Types), and Application (Food and Beverages, Household Care, Bioenergy, Pharmaceutical and Biotechnology, Feed, and Other Applications) - Global Opportunity Analysis and Industry Forecast, 2020–2027

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Abstracts

Enzymes act as a catalyst in several bio-chemical reactions. These enzymes are responsible for controlling or speeding up the reaction, thus, providing numerous advantages over conventional chemical processes with respect to process efficiency and sustainability. As a result of which, enzymes have gained an increased popularity in industrial applications. Enzyme catalysis has been scaled up for various commercial processes such as food & beverage industry, textiles, detergents, paper & pulp, waste management, leather processing, biofuel industry, pharmaceuticals & biotechnology industry, as well as agriculture. The demand for enzymes is all set to increase across all industry verticals owing to their highly efficient bio-catalysis, product selectivity, lower physiological and environmental toxicity. Moreover, utilization of lesser energy (temperature) and overall time reduction in manufacturing process has resulted in significant cost reductions. Therefore, this is expected to amplify the adoption and use of enzymes globally. The global enzymes market was valued at \$8,636.8 million in 2019, and is projected to reach \$14,507.6 million in 2027 at a CAGR of 6.5% from 2020 to 2027.

Numerous factors are responsible for driving the growth of the global enzymes market over the analysis period. Biotechnological, pharmaceutical, and food & beverage as well as the biofuel industry are reaping the benefits offered by enzymes. The surge in demand for enzymes in pharmaceutical industry to synthesize intermediates in active pharmaceutical ingredient (API) production for effective medications is anticipated to boost the growth of the enzymes market.

Likewise, the ability of an enzyme to convert complex molecules to simpler molecules (starch to glucose) in food & beverage companies, removal of fats & oil stains in the detergent industry, bioethanol for biofuel production, and improved bleaching properties in paper & pulp industries are the factors anticipated to propel the demand for enzymes in the coming years. In addition, rise in prevalence of various chronic diseases such as digestive diseases & inflammation, and upsurge in demand for renewable energy sources such as biofuels are further supplement the market growth. Conversely, factors such as handling & safety issues associated with enzymes and higher sensitivity to temperature & pH are anticipated to hamper the market growth. On the contrary, increase in awareness about the application of enzymes in protein engineering technology and higher market potential in the untapped emerging economies are expected to provide lucrative growth opportunities for the market expansion.

The global enzymes market is segmented on the basis of type, source, reaction type, application, and region. By type, the market is fragmented into protease, carbohydrase, lipase, polymerase & nuclease, and others. On the basis of source, the global enzymes market is categorized into microorganisms, plants, and animals. By reaction type, the global enzymes market is classified into hydrolases, oxidoreductases, transferases, lyases, and others. The applications covered in the study include food & beverages, household care, bioenergy, pharmaceutical & biotechnology, feed, and others. Region wise, it is analyzed across North America, Europe, Asia-Pacific, and LAMEA.

KEY BENEFITS FOR STAKEHOLDERS

This report provides a detailed quantitative analysis of the current market trends and future estimations from 2019 to 2027, which assists to identify the prevailing market opportunities.

An in-depth analysis of various regions is anticipated to provide a detailed understanding of the

current trends to enable stakeholders to formulate region-specific plans.

A comprehensive analysis of the factors that drive and restrain the growth of the global enzymes market is provided.

An extensive analysis of various regions provides insights that allow companies to strategically plan their business moves.

KEY MARKET SEGMENTS

By Type

Protease

Carbohydrase

Lipase

Polymerase and Nuclease

Other Types

By Source

Microorganisms

Plants

Animals

By Reaction Type

Hydrolase

Oxidoreductase

Transferase

Lyase

Other Reaction Types

By Application

Food and Beverages

Household Care

Bioenergy

Pharmaceutical and Biotechnology

Feed

Other Applications

By Region

North America

U.S.

Canada

Mexico

Europe

Germany

France

UK

Italy

Spain

Rest of Europe

Asia-Pacific

China

Japan

India

Australia

South Korea

Rest of Asia-Pacific

LAMEA

Brazil

Saudi Arabia

South Africa

Rest of LAMEA

KEY MARKET PLAYERS

Novozymes A/S

Koninklijke DSM N.V.

DuPont de Nemours, Inc.

BASF SE

Advanced Enzyme Technologies Ltd.

AB Enzymes GmbH

Codexis, Inc.

Amano Enzyme, Inc.

F. Hoffmann-La Roche Ltd.

Thermo Fisher Scientific Inc.

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