

Technical Enzymes Market by Type (Amylases, Cellulases, Proteases, and Lipases), Industry (Biofuel, Starch, Textiles & Leather, and Paper & Pulp), Source (Microorganism, Plant, and Animal), Form (Liquid and Dry), and Region - Global Forecast to 2026

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Abstracts

“Multifunctional properties of technical enzymes in the biofuel, starch processing, textiles & leather, and paper & pulp industries to drive the market.”

The global technical enzymes market size is projected to grow from USD 1.1 billion in 2019 to USD 1.5 billion by 2026, recording a compound annual growth rate (CAGR) of 4.0% during the forecast period, in terms of value. The increasing trend of environmental concerns in developing countries and advancements of R&D activities for technical enzymes are the major factors that are projected to drive the growth of the technical enzymes market. However, the cost of enzyme usage in various industrial applications remains high during the formulation process of technical enzymes, which is projected to inhibit the growth of the market.

“The biofuel industry dominated the technical enzymes market throughout the forecasted period.”

The biofuel industry has witnessed increased usage of technical enzymes. Consumer inclination toward an alternative to gasoline for the reduction in harmful auto & industrial emissions has augmented the usage of biofuels in many developed countries. Enzymes have been used for the conversion of biomass into biofuels, as they overcome many drawbacks associated with the use of traditional chemicals as catalysts for biofuel generation. Enzymes are safer substitutes for MTBE (methyl tert-butyl ether), as MTBE is a blending component to oxygenate gasoline and hazardous to human health.

Enzymes also allow using unrefined feedstock, such as waste oil, readily without the need to separate the free fatty acids that may be present in large amounts in the feedstock. Due to these factors, the dairy segment is projected to dominate the market during the forecast period.

“Lipases are projected to grow at a higher growth rate during the forecast period.”

Lipases are enzymes that catalyze the hydrolysis of lipids and are one of the important groups of biocatalysts with biotechnological applications. Lipases have been isolated from many species of plants, animals, bacteria, and fungi. The ones extracted from microorganisms are used in various industries such as textile & leather, biofuel, pulp & paper, and wastewater treatment. Lipases are the major enzymes used for commercializing biofuel production with enzymatic processes. As biological catalysts, they convert the free fatty acids (FFA) and triacylglycerol to fatty acid methyl esters, which generate biofuels. Transesterification is the functional benefit to the pulp & paper industry by using lipases. Due to these factors, the lipases type is projected to grow at the highest rate, at a CAGR of 5.2% during the forecast period.

“The Asia Pacific region is projected to be the fastest-growing market during the forecast period.”

The Asia Pacific region projected to grow at the highest CAGR between 2019 and 2026. The increasing demand for technical enzymes in starch and textile & leather industries is projected to create lucrative growth opportunities for manufacturers in the market in the Asia Pacific region. This dominance is majorly due to the change in technological innovations in machinery, synthetic fibers, logistics, and globalization of business. Furthermore, the shift of industrial operations such as textile & leather production from developed nations in North America and Western Europe into the Asia Pacific region over the past decade has boosted the market for technical enzymes.

According to OECD-FAO Agricultural Outlook 2018–2027, Asia Pacific is the leading region in terms of sugar production and is projected to expand its production share from 36% (Average 2015–17) to 38% by 2027. Owing to the large production of sugar, enzymes are often used to hydrolyze starch so as to enhance the sugar production process and improve the overall performance. Furthermore, the use of enzymes in the biofuel industry is expected to grow at a higher rate, owing to the increase in biofuel production and considering its usage in fueling automobiles and electricity and government support.

In-depth interviews were conducted with CXOs, managers, and key executives from various key organizations operating in the technical enzymes market.

By Company Type: Tire 1: 40%, Tire 2: 25%, and Tire 3: 35%

By Designation: Managers: 40%, CXOs: 30%, and Executives: 30%

By Region: Europe: 50%, Asia Pacific: 20%, North America: 20%, and RoW: 10%

The technical enzymes market comprises major players, such as BASF (Germany), DuPont (US), Associated British Foods (UK), Novozymes (Denmark), DSM (Netherlands), Dyadic International (US), Advanced Enzymes Technologies (India), Maps Enzymes (India), Epygen Labs (India), Megazyme (Ireland), Aumgene Biosciences (India), Enzymatic Deinking Technologies (US), Tex Biosciences (India), Denykem (UK), MetGen (Finland), Creative Enzymes (US), Sunson Industry Group (China), Transbiodiesel (Israel), Enzyme Supplies (UK), and Enzyme Solutions (US). The study includes an in-depth competitive analysis of these players in the technical enzymes market, with their company profiles, recent developments, and the key market strategies.

Research Coverage

The study covers the technical enzymes market across segments. It aims at estimating the market size and its growth potential across different segments such as industry, form, type, source, and region. The study also includes an in-depth competitive analysis of key players in the market, along with their company profiles, key observations related to product and business offerings, recent developments, and key market strategies.

Key Benefits of Buying the Report

The report will help market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall technical enzymes market and subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report will also help the stakeholders to understand the pulse of the market and will provide them with information on key market drivers, restraints, challenges, and opportunities.

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