

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.

Contents

1 INTRODUCTION

- 1.1 OBJECTIVES OF THE STUDY
- 1.2 MARKET DEFINITION
- 1.3 STUDY SCOPE
- 1.4 REGIONS COVERED
- 1.5 PERIODIZATION CONSIDERED
- 1.6 CURRENCY CONSIDERED
- 1.7 VOLUME UNIT CONSIDERED
- 1.8 STAKEHOLDERS

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
- 2.2 MARKET SIZE ESTIMATION
 - 2.2.1 APPROACH ONE (BASED ON INDUSTRY, BY REGION)
 - 2.2.2 APPROACH TWO (BASED ON GLOBAL MARKET)
- 2.3 DATA TRIANGULATION
- 2.4 ASSUMPTIONS FOR THE STUDY
- 2.5 LIMITATIONS OF THE STUDY

3 EXECUTIVE SUMMARY

4 PREMIUM INSIGHTS

- 4.1 OVERVIEW OF THE TECHNICAL ENZYMES MARKET
- 4.2 TECHNICAL ENZYMES MARKET: MAJOR REGIONAL SUBMARKETS
- 4.3 NORTH AMERICA: TECHNICAL ENZYMES MARKET, BY KEY INDUSTRY AND COUNTRY
- 4.4 TECHNICAL ENZYMES MARKET, BY TYPE AND REGION
- 4.5 TECHNICAL ENZYMES MARKET, BY INDUSTRY
- 4.6 TECHNICAL ENZYMES MARKET, BY FORM

5 MARKET OVERVIEW

- 5.1 INTRODUCTION
- 5.2 MARKET DYNAMICS

5.2.1 DRIVERS

5.2.1.1 Growth in environmental concerns and increase in demand for biofuel

5.2.1.2 Advancements in R&D activities for technical enzymes

5.2.2 RESTRAINTS

5.2.2.1 Stringent regulatory framework

5.2.3 OPPORTUNITIES

5.2.3.1 Need for alternatives to synthetic chemicals

5.2.4 CHALLENGES

5.2.4.1 Concerns over quality, safety, and consumer perception toward enzymes

5.2.4.2 Lack of transparency in patent protection laws

5.3 VALUE CHAIN

5.4 YC & YCC SHIFT

5.5 REGULATIONS

5.5.1 CLP LEGISLATION

5.5.2 BIOCIDAL PRODUCT REGULATION (BPR)

6 TECHNICAL ENZYMES MARKET, BY TYPE

6.1 INTRODUCTION

6.2 AMYLASES

6.2.1 AMYLASE USAGE HAS INCREASED AS IT IS A BOON TO THE BIOFUEL & TEXTILE INDUSTRY

6.3 CELLULASES

6.3.1 THEIR COMPLEX NATURE ALLOWS WIDE INDUSTRIAL USAGE

6.4 PROTEASES

6.4.1 COMPETENT CHARACTERISTIC TO HYDROLYZE PROTEINS HAS BOOSTED ITS INDUSTRIAL USE

6.5 LIPASES

6.5.1 COMMERCIALIZING BIOFUEL PRODUCTION FROM ENZYMATIC PROCESSES HAS FUELED THE MARKET FOR LIPASES

6.6 OTHER TYPES

6.6.1 FUNCTIONAL BENEFITS IN VARIOUS INDUSTRIES DRIVE THE MARKET FOR OTHER TYPES OF ENZYMES

7 TECHNICAL ENZYMES MARKET, BY INDUSTRY

7.1 INTRODUCTION

7.2 BIOFUEL

7.2.1 ENZYMES AS BIOLOGICAL CATALYSTS IN THE PRODUCTION OF BIOFUEL

HAVE BEEN FUELING THE INDUSTRY

7.3 STARCH

7.3.1 ENZYMES FUNCTIONALLY BENEFIT STARCH PROCESSING

7.4 TEXTILE & LEATHER

7.4.1 LESS CHEMICAL DISCHARGE IN WATER AND IMPROVEMENT IN PRODUCT QUALITY HAVE FUELED THE USAGE OF ENZYMES

7.5 PAPER & PULP

7.5.1 ENZYME USAGE INCREASES THE RECYCLING OF PAPER IN THE INDUSTRY

7.6 OTHER INDUSTRIES

7.6.1 ENZYMES EFFECTIVELY BREAK DOWN THE ORGANIC WASTES BY MITIGATING THE USAGE OF CHEMICALS IN WASTEWATER TREATMENT

8 TECHNICAL ENZYMES MARKET, BY FORM

8.1 INTRODUCTION

8.2 LIQUID

8.2.1 EASE OF USE IN THE BIOFUEL & TEXTILE INDUSTRIES BOOSTS THE USAGE OF THE LIQUID FORM

8.3 DRY (POWDER & GRANULAR)

8.3.1 DRY FORM ENABLES BETTER ACCURACY OF DOSAGES

9 TECHNICAL ENZYMES MARKET, BY SOURCE

9.1 INTRODUCTION

9.2 MICROORGANISM

9.2.1 HUGE PRODUCTION IN LESSER TIME SPAN BOOSTS THE INDUSTRIAL USAGE OF MICROBIAL ENZYMES

9.3 PLANT

9.3.1 PLANT-BASED ENZYMES BOOST THE PRODUCTION OF BIOMASS SUITABLE FOR CONVERSION TO BIOFUELS

9.4 ANIMAL

9.4.1 BEING TEMPERATURE-SENSITIVE DISCOURAGES THE INDUSTRIAL USAGE OF ANIMAL-BASED ENZYMES

10 TECHNICAL ENZYMES MARKET, BY REGION

10.1 INTRODUCTION

10.2 NORTH AMERICA

10.2.1 US

10.2.1.1 High consumption and production of biofuel

10.2.2 CANADA

10.2.2.1 Technological advances in biotechnology and bio-sciences

10.2.3 MEXICO

10.2.3.1 Government campaigns to blend ethanol with petrol will drive the market

10.3 EUROPE

10.3.1 FRANCE

10.3.1.1 Investment in advanced technologies for biofuel production

10.3.2 GERMANY

10.3.2.1 Growth in focus on technical textiles is driving the demand for technical enzymes

10.3.3 UK

10.3.3.1 Government funds to support biofuel production to reduce carbon emission

10.3.4 NETHERLANDS

10.3.4.1 Implementation of the Renewable Energy Directive in the transportation sector

10.3.5 SPAIN

10.3.5.1 Wide availability of raw materials for biofuel production

10.3.6 BELGIUM

10.3.6.1 Development in the textile industry in Belgium to increase the demand for technical enzymes

10.3.7 REST OF EUROPE

10.3.7.1 Growth in consumption of biofuel in most European countries

10.4 ASIA PACIFIC

10.4.1 CHINA

10.4.1.1 Shifting of the key players' manufacturing operations from Europe and North America to China

10.4.2 INDIA

10.4.2.1 Adoption of improved technologies in starch processing is expected to drive the market for technical enzymes

10.4.3 AUSTRALIA & NEW ZEALAND

10.4.3.1 Government initiatives and policies introducing ethanol biofuel mandates across the region

10.4.4 JAPAN

10.4.4.1 Focus on expanding apparel & home textile chemical businesses

10.4.5 REST OF ASIA PACIFIC

10.4.5.1 Developing countries in the Asia Pacific region present immense scope for the technical enzymes industry

10.5 SOUTH AMERICA

10.5.1 BRAZIL

10.5.1.1 Advancements in starch processing technology in Brazil

10.5.2 ARGENTINA

10.5.2.1 Growth of the textile industry for domestic consumption

10.5.3 REST OF SOUTH AMERICA

10.5.3.1 Expansion of pulp and paper manufacturers

10.6 REST OF THE WORLD

10.6.1 AFRICA

10.6.1.1 Growth in the potential of the African biofuel industry

10.6.2 MIDDLE EAST

10.6.2.1 Increase in demand for ethical and natural cosmetic products

11 COMPETITIVE LANDSCAPE

11.1 INTRODUCTION

11.2 COMPETITIVE LEADERSHIP MAPPING

11.2.1 VISIONARY LEADERS

11.2.2 DYNAMIC DIFFERENTIATORS

11.2.3 INNOVATORS

11.2.4 EMERGING COMPANIES

11.3 START-UP MICROQUADRANT

11.3.1 PROGRESSIVE COMPANIES

11.3.2 STARTING BLOCKS

11.3.3 RESPONSIVE COMPANIES

11.3.4 DYNAMIC COMPANIES

11.4 MARKET SHARE ANALYSIS

11.5 COMPETITIVE SCENARIO

11.5.1 EXPANSIONS

11.5.2 AGREEMENTS, COLLABORATIONS, AND JOINT VENTURES

11.5.3 NEW PRODUCT LAUNCHES

11.5.4 ACQUISITIONS

12 COMPANY PROFILES

(Business overview, Products offered, Recent Developments, SWOT analysis, Right to Win)*

12.1 BASF

12.2 DUPONT

- 12.3 ABF
- 12.4 NOVOZYMES
- 12.5 DSM
- 12.6 DYADIC INTERNATIONAL
- 12.7 ADVANCED ENZYMES TECHNOLOGIES
- 12.8 MAPS ENZYMES
- 12.9 EPYGEN LABS
- 12.10 MEGAZYME
- 12.11 AUMGENE BIOSCIENCES
- 12.12 ENZYMATIC DEINKING TECHNOLOGIES
- 12.13 TEX BIOSCIENCES
- 12.14 DENYKEM
- 12.15 METGEN
- 12.16 CREATIVE ENZYMES
- 12.17 SUNSON INDUSTRY GROUP
- 12.18 TRANSBIODIESEL
- 12.19 ENZYME SUPPLIES
- 12.20 ENZYME SOLUTIONS

*Details on Business overview, Products offered, Recent Developments, SWOT analysis, Right to Win might not be captured in case of unlisted companies.

13 APPENDIX

- 13.1 DISCUSSION GUIDE
- 13.2 KNOWLEDGE STORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL
- 13.3 AVAILABLE CUSTOMIZATIONS
- 13.4 RELATED REPORTS
- 13.5 AUTHOR DETAILS

List Of Tables

LIST OF TABLES

- TABLE 1 USD EXCHANGE RATES CONSIDERED, 2016–2019
- TABLE 2 TECHNICAL ENZYMES MARKET SNAPSHOT, 2019 VS. 2026
- TABLE 3 MAJOR ETHANOL PRODUCING COUNTRIES/REGIONS (MILLION LITER)
- TABLE 4 TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)
- TABLE 5 TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (TON)
- TABLE 6 TECHNICAL AMYLASES MARKET SIZE, BY REGION, 2017–2026 (USD MILLION)
- TABLE 7 TECHNICAL AMYLASES MARKET SIZE, BY REGION, 2017–2026 (TON)
- TABLE 8 TECHNICAL CELLULASES MARKET SIZE, BY REGION, 2017–2026 (USD MILLION)
- TABLE 9 TECHNICAL CELLULASES MARKET SIZE, BY REGION, 2017–2026 (TON)
- TABLE 10 TECHNICAL PROTEASES MARKET SIZE, BY REGION, 2017–2026 (USD MILLION)
- TABLE 11 TECHNICAL PROTEASES MARKET SIZE, BY REGION, 2017–2026 (TON)
- TABLE 12 TECHNICAL LIPASES MARKET SIZE, BY REGION, 2017–2026 (USD MILLION)
- TABLE 13 TECHNICAL LIPASES MARKET SIZE, BY REGION, 2017–2026 (TON)
- TABLE 14 OTHER TECHNICAL ENZYME TYPES MARKET SIZE, BY REGION, 2017–2026 (USD MILLION)
- TABLE 15 OTHER TECHNICAL ENZYME TYPES MARKET SIZE, BY REGION, 2017–2026 (TON)
- TABLE 16 TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)
- TABLE 17 TECHNICAL ENZYMES MARKET SIZE IN THE BIOFUEL INDUSTRY, BY REGION, 2017–2026 (USD MILLION)
- TABLE 18 TECHNICAL ENZYMES MARKET SIZE IN THE STARCH INDUSTRY, BY REGION, 2017–2026 (USD MILLION)
- TABLE 19 TECHNICAL ENZYMES MARKET SIZE IN THE TEXTILE & LEATHER INDUSTRY, BY REGION, 2017–2026 (USD MILLION)
- TABLE 20 TECHNICAL ENZYMES MARKET SIZE IN THE PAPER & PULP INDUSTRY, BY REGION, 2017–2026 (USD MILLION)
- TABLE 21 TECHNICAL ENZYMES MARKET SIZE IN OTHER INDUSTRIES, BY REGION, 2017–2026 (USD MILLION)
- TABLE 22 TECHNICAL ENZYMES MARKET SIZE, BY FORM, 2017–2026 (USD

MILLION)

TABLE 23 LIQUID TECHNICAL ENZYMES MARKET SIZE, BY REGION, 2017–2026
(USD MILLION)

TABLE 24 DRY TECHNICAL ENZYMES MARKET SIZE, BY REGION, 2017–2026
(USD MILLION)

TABLE 25 TECHNICAL ENZYMES MARKET SIZE, BY SOURCE, 2017–2026 (USD
MILLION)

TABLE 26 MICROORGANISM-BASED TECHNICAL ENZYMES MARKET SIZE, BY
REGION, 2017–2026 (USD MILLION)

TABLE 27 PLANT-BASED TECHNICAL ENZYMES MARKET SIZE, BY REGION,
2017–2026 (USD MILLION)

TABLE 28 ANIMAL-BASED TECHNICAL ENZYMES MARKET SIZE, BY REGION,
2017–2026 (USD MILLION)

TABLE 29 TECHNICAL ENZYMES MARKET SIZE, BY REGION, 2017–2026 (USD
MILLION)

TABLE 30 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY COUNTRY,
2017–2026 (USD MILLION)

TABLE 31 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE,
2017–2026 (USD MILLION)

TABLE 32 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE,
2017–2026 (TON)

TABLE 33 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY
INDUSTRY, 2017–2026 (USD MILLION)

TABLE 34 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE FOR THE
BIOFUEL INDUSTRY, BY COUNTRY, 2017–2026 (USD MILLION)

TABLE 35 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE FOR THE
STARCH INDUSTRY, BY COUNTRY, 2017–2026 (USD MILLION)

TABLE 36 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE FOR THE
TEXTILE & LEATHER INDUSTRY, BY COUNTRY, 2017–2026 (USD MILLION)

TABLE 37 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE FOR THE
PAPER &

PULP INDUSTRY, BY COUNTRY, 2017–2026 (USD MILLION)

TABLE 38 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE FOR THE
OTHER INDUSTRIES, BY COUNTRY, 2017–2026 (USD MILLION)

TABLE 39 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY SOURCE,
2017–2026 (USD MILLION)

TABLE 40 NORTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY FORM,
2017–2026 (USD MILLION)

TABLE 41 US: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD

MILLION)

TABLE 42 US: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026
(USD MILLION)

TABLE 43 CANADA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026
(USD MILLION)

TABLE 44 CANADA: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY,
2017–2026 (USD MILLION)

TABLE 45 MEXICO: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026
(USD MILLION)

TABLE 46 MEXICO: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY,
2017–2026 (USD MILLION)

TABLE 47 EUROPE: TECHNICAL ENZYMES MARKET SIZE, BY COUNTRY,
2017–2026 (USD MILLION)

TABLE 48 EUROPE: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026
(USD MILLION)

TABLE 49 EUROPE: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026
(TON)

TABLE 50 EUROPE: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY

2017–2026 (USD MILLION)

TABLE 51 EUROPE: TECHNICAL ENZYMES MARKET, BY SOURCE, 2017–2026
(USD MILLION)

TABLE 52 EUROPE: TECHNICAL ENZYMES MARKET SIZE, BY FORM, 2017–2026
(USD MILLION)

TABLE 53 FRANCE: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026
(USD MILLION)

TABLE 54 FRANCE: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY,
2017–2026 (USD MILLION)

TABLE 55 GERMANY: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026
(USD MILLION)

TABLE 56 GERMANY: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY,
2017–2026 (USD MILLION)

TABLE 57 UK: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD
MILLION)

TABLE 58 UK: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026
(USD MILLION)

TABLE 59 NETHERLANDS: TECHNICAL ENZYMES MARKET SIZE, BY TYPE,
2017–2026 (USD MILLION)

TABLE 60 NETHERLANDS: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 61 SPAIN: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 62 SPAIN: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 63 BELGIUM: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 64 BELGIUM: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 65 REST OF EUROPE: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 66 REST OF EUROPE: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 67 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE, BY COUNTRY/REGION, 2017–2026 (USD MILLION)

TABLE 68 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 69 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (TON)

TABLE 70 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 71 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE FOR THE BIOFUEL INDUSTRY, BY COUNTRY/REGION, 2017–2026 (USD MILLION)

TABLE 72 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE FOR THE STARCH INDUSTRY, BY COUNTRY/REGION, 2017–2026 (USD MILLION)

TABLE 73 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE FOR THE TEXTILE & LEATHER INDUSTRY, BY COUNTRY/REGION, 2017–2026 (USD MILLION)

TABLE 74 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE FOR THE PAPER & PULP INDUSTRY, BY COUNTRY/REGION, 2017–2026 (USD MILLION)

TABLE 75 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE FOR THE OTHER INDUSTRIES, BY COUNTRY/REGION, 2017–2026 (USD MILLION)

TABLE 76 ASIA PACIFIC: TECHNICAL ENZYMES MARKET, BY SOURCE, 2017–2026 (USD MILLION)

TABLE 77 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE, BY FORM, 2017–2026 (USD MILLION)

TABLE 78 CHINA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 79 CHINA: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY,

2017–2026 (USD MILLION)

TABLE 80 INDIA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 81 INDIA: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 82 AUSTRALIA & NEW ZEALAND: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 83 AUSTRALIA & NEW ZEALAND: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 84 JAPAN: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 85 JAPAN: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 86 REST OF ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 87 REST OF ASIA PACIFIC: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 88 SOUTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY COUNTRY, 2017–2026 (USD MILLION)

TABLE 89 SOUTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 90 SOUTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (TON)

TABLE 91 SOUTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 92 SOUTH AMERICA: TECHNICAL ENZYMES MARKET, BY SOURCE, 2017–2026 (USD MILLION)

TABLE 93 SOUTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY FORM, 2017–2026 (USD MILLION)

TABLE 94 BRAZIL: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 95 BRAZIL: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 96 ARGENTINA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 97 ARGENTINA: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 98 REST OF SOUTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 99 REST OF SOUTH AMERICA: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 100 ROW: TECHNICAL ENZYMES MARKET SIZE, BY REGION, 2017–2026 (USD MILLION)

TABLE 101 ROW: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 102 ROW: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (TON)

TABLE 103 ROW: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 104 ROW: TECHNICAL ENZYMES MARKET SIZE, BY SOURCE, 2017–2026 (USD MILLION)

TABLE 105 ROW: TECHNICAL ENZYMES MARKET SIZE, BY FORM, 2017–2026 (USD MILLION)

TABLE 106 AFRICA: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 107 AFRICA: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 108 MIDDLE EAST: TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2017–2026 (USD MILLION)

TABLE 109 MIDDLE EAST: TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2017–2026 (USD MILLION)

TABLE 110 EXPANSIONS, 2017–2019

TABLE 111 AGREEMENTS, COLLABORATIONS, AND JOINT VENTURES, 2017–2019

TABLE 112 NEW PRODUCT LAUNCHES, 2017–2019

TABLE 113 ACQUISITIONS, 2017–2019

List Of Figures

LIST OF FIGURES

FIGURE 1 MARKET SEGMENTATION

FIGURE 2 TECHNICAL ENZYMES MARKET: RESEARCH DESIGN

FIGURE 4 KEY DATA FROM PRIMARY SOURCES

FIGURE 5 TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2019 VS. 2026 (USD MILLION)

FIGURE 6 TECHNICAL ENZYMES MARKET SIZE, BY TYPE, 2019 VS. 2026 (KT)

FIGURE 7 TECHNICAL ENZYMES MARKET SIZE, BY INDUSTRY, 2019 VS. 2026 (USD MILLION)

FIGURE 8 TECHNICAL ENZYMES MARKET SIZE, BY SOURCE, 2019 VS. 2026 (USD MILLION)

FIGURE 9 TECHNICAL ENZYMES MARKET SIZE, BY FORM, 2019 VS. 2026 (USD MILLION)

FIGURE 10 TECHNICAL ENZYMES MARKET GROWTH AND SHARE (VALUE), BY REGION, 2018

FIGURE 11 GROWING DEMAND FOR BIOFUEL IS EXPECTED TO PROPEL THE MARKET

FOR TECHNICAL ENZYMES

FIGURE 12 THE US WAS THE LARGEST MARKET FOR TECHNICAL ENZYMES IN 2018

FIGURE 13 THE US ACCOUNTED FOR THE LARGEST SHARE IN THE NORTH AMERICAN MARKET IN 2018

FIGURE 14 NORTH AMERICA IS PROJECTED TO DOMINATE THE MARKET FOR TECHNICAL ENZYMES

FIGURE 15 THE BIOFUEL INDUSTRY IS PROJECTED TO DOMINATE THE TECHNICAL

ENZYMES MARKET DURING THE FORECAST PERIOD

FIGURE 16 NORTH AMERICA DOMINATED BOTH FORMS OF TECHNICAL ENZYMES IN 2018

FIGURE 17 TECHNICAL ENZYMES MARKET DYNAMICS

FIGURE 18 TECHNICAL ENZYMES MARKET: VALUE CHAIN

FIGURE 19 YC & YCC SHIFT FOR TECHNICAL ENZYMES MARKET

FIGURE 20 TECHNICAL ENZYMES MARKET SHARE (VALUE), BY TYPE, 2019 VS. 2026

FIGURE 21 TECHNICAL ENZYMES MARKET SHARE (VALUE), BY INDUSTRY, 2019 VS. 2026

FIGURE 22 TECHNICAL ENZYMES MARKET SHARE (VALUE), BY FORM, 2019 VS. 2026

FIGURE 23 TECHNICAL ENZYMES MARKET SHARE (VALUE), BY SOURCE, 2019 VS. 2026

FIGURE 24 CHINA TO RECORD THE HIGHEST GROWTH RATE IN THE TECHNICAL ENZYMES MARKET DURING THE FORECAST PERIOD

FIGURE 25 NORTH AMERICA: TECHNICAL ENZYMES MARKET SNAPSHOT

FIGURE 26 ASIA PACIFIC: TECHNICAL ENZYMES MARKET SNAPSHOT

FIGURE 27 TECHNICAL ENZYMES MARKET: COMPETITIVE LEADERSHIP MAPPING, 2018

FIGURE 28 TECHNICAL ENZYMES START-UP MARKET: COMPETITIVE LEADERSHIP

MAPPING, 2018

FIGURE 29 BASF: COMPANY SNAPSHOT

FIGURE 30 BASF: SWOT ANALYSIS

FIGURE 31 DUPONT: COMPANY SNAPSHOT

FIGURE 32 DUPONT: SWOT ANALYSIS

FIGURE 33 ABF: COMPANY SNAPSHOT

FIGURE 34 ABF: SWOT ANALYSIS

FIGURE 35 NOVOZYMES: COMPANY SNAPSHOT

FIGURE 36 NOVOZYMES: SWOT ANALYSIS

FIGURE 37 DSM: COMPANY SNAPSHOT

FIGURE 38 DSM: SWOT ANALYSIS

FIGURE 39 DYADIC INTERNATIONAL: COMPANY SNAPSHOT

FIGURE 40 ADVANCED ENZYMES TECHNOLOGIES: COMPANY SNAPSHOT

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