

Protein Hydrolysis Enzymes Market by Source (Microorganisms, Animals, Plants), Method of Production (Fermentation and Extraction), Product, Application (Detergent, Pharmaceuticals, Food, Textiles & Leather) and Region - Global Forecast to 2027

<https://marketpublishers.com/r/PB1A7AE00B6EN.html>

Date: October 2022

Pages: 232

Price: US\$ 4,950.00 (Single User License)

ID: PB1A7AE00B6EN

Abstracts

The protein hydrolysis enzymes market is projected to reach USD 2.9 Billion by 2027 growing at a CAGR of 6.2% from 2022 to 2027. With the increasing use of protein hydrolysis enzymes as chemical substitutes, particularly in detergent and food applications, the market for protein hydrolysis enzymes has experienced significant growth. Protein hydrolysis enzymes are increasingly being consumed in the food market with the increased consumption of meat and bakery products. Moreover, the increasing implications of protein hydrolysis enzymes in the pharmaceutical industry pose significant growth opportunities in the market. The growing market demand for protein hydrolysis enzymes is propelling the players in the market to adopt strategies such as product launches, deals and expansions to increase their market penetration. In November 2021, Biocatalysts launched a new product named “Promod 324L” for the pet food industry. It improved the processibility of the protein by increasing the solubility and reducing the viscosity of the protein. In October 2020, BASF expanded the detergent enzyme technology to provide key ingredients for the home care and I&I industry.

“Detergent industry has high demand in application segment.”

The detergent industry dominated the protein hydrolysis enzymes by application segment in 2022. Protein hydrolysis enzymes and other enzymes used in detergent

formulations have high activity and stability over a broad range of pH and temperature. Subtilisins are a prototypical group of bacterial serine proteases used extensively in detergents. Protein stains such as grass, blood, eggs, and human sweat are eliminated by proteolysis in laundry detergents. In addition, Serine proteases are the most important group for detergent applications. Adoption of new processing technologies such as ultrafiltration and reverse osmosis offers new avenues to cleaning operations. Specific application of enzymes in detergents includes dishwashing, cleaning of medical devices, laundry, color and fabric care, ware-washing applications, and floor cleaning. The usage of enzymes helps in higher product quality, lower manufacturing cost, and less waste, and reduced energy consumption. Major manufacturers of protein hydrolysis enzymes in the detergent industry include Novozymes (Denmark), BASF SE (Germany), AB Enzymes (UK), and Creative Enzymes (US).

“Asia Pacific is projected to witness the growth of 8.40% during the forecast period in the protein hydrolysis enzymes market.”

The protein hydrolysis enzymes market in the Asia Pacific region is projected to grow at a CAGR of 8.40% during the forecast period. Asia Pacific is projected to be the fastest growing market owing to high population base, rising disposable income, and rising incidences of diseases in the region. The region is expected to grow at a higher rate owing to the growing urbanization and increased demand in the packaged food, soap & washing powder, livestock feed, and pharmaceutical sectors. China, Japan, South Korea, and India have a reputation in the global pharmaceutical market for the continuous innovations done by their homegrown biotechnological firms. Protein hydrolysis enzymes are being developed in various forms to suit the varied needs of the food industries as well. The market for proteases in the Asia-Pacific region is expected to have positive growth in the future.

The break-up of Primaries:

By Company Type: Demand side – 43%, Supply side – 57%

By Designation: C level – 29%, Managers – 21%, Executives – 50%

By Region: North America – 34%, Europe – 37%, Asia Pacific – 16%, RoW – 13%

Leading players profiled in this report:

Novozymes (Denmark)

Associated British Foods (UK)

DSM (Netherlands)

DuPont (US)

BASF (Germany)

Advanced Enzyme Technologies (India)

Chr. Hansen Holding A/S (Denmark)

Dyadic International (US)

Research Coverage:

The report segments the protein hydrolysis enzymes market based on source, method of production, product, application, and region. In terms of insights, this report has focused on various levels of analyses—the competitive landscape, end-use analysis, and company profiles, which together comprise and discuss views on the emerging & high-growth segments of the global protein hydrolysis enzymes market, high-growth regions, countries, government initiatives, drivers, restraints, opportunities, and challenges.

Reasons to buy this report:

To get a comprehensive overview of the protein hydrolysis enzymes market

To gain wide-ranging information about the top players in this industry, their product portfolios, and key strategies adopted by them

To gain insights into the major countries/regions in which the protein hydrolysis enzymes market is flourishing

Contents

1 INTRODUCTION

- 1.1 OBJECTIVES
- 1.2 MARKET DEFINITION
- 1.3 STUDY SCOPE
- FIGURE 1 MARKET SEGMENTATION
- 1.4 REGIONS COVERED
- FIGURE 2 REGION SEGMENTATION
- 1.5 YEARS CONSIDERED
- FIGURE 3 YEARS CONSIDERED
- 1.6 CURRENCY CONSIDERED
- TABLE 1 USD EXCHANGE RATES CONSIDERED
- 1.7 VOLUME UNIT CONSIDERED
- 1.8 STAKEHOLDERS
- 1.9 SUMMARY OF CHANGES

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
- FIGURE 4 PROTEIN HYDROLYSIS ENZYMES MARKET: RESEARCH DESIGN
- 2.1.1 SECONDARY DATA
 - 2.1.1.1 Key data from secondary sources
- 2.1.2 PRIMARY DATA
 - 2.1.2.1 Key data from primary sources
 - 2.1.2.2 Key industry insights
 - 2.1.2.3 Breakdown of primary interviews
- FIGURE 5 BREAKDOWN OF PRIMARY INTERVIEWS: BY VALUE CHAIN, DESIGNATION, AND REGION
- 2.2 FACTOR ANALYSIS
- 2.2.1 INTRODUCTION
- 2.2.2 DEMAND-SIDE ANALYSIS
- FIGURE 6 KEY ECONOMIES BASED ON GDP, 2019–2021 (USD TRILLION)
- 2.2.3 SUPPLY-SIDE ANALYSIS
 - 2.2.3.1 Research & development of protein hydrolysis enzymes
- 2.3 MARKET SIZE ESTIMATION
- 2.3.1 APPROACH ONE (BASED ON APPLICATIONS, BY REGION)
- FIGURE 7 APPROACH ONE (BASED ON APPLICATIONS, BY REGION)

- 2.3.2 APPROACH TWO (BASED ON GLOBAL MARKET)
- FIGURE 8 APPROACH TWO (BASED ON GLOBAL MARKET)
- 2.4 DATA TRIANGULATION
- FIGURE 9 DATA TRIANGULATION METHODOLOGY
- 2.5 RESEARCH ASSUMPTIONS
- 2.6 RESEARCH LIMITATIONS

3 EXECUTIVE SUMMARY

- TABLE 2 PROTEIN HYDROLYSIS ENZYMES MARKET SNAPSHOT, 2022 VS. 2027
- FIGURE 10 PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022 VS. 2027 (USD MILLION)
- FIGURE 11 PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022 VS. 2027 (USD MILLION)
- FIGURE 12 PROTEIN HYDROLYSIS ENZYMES MARKET SHARE, BY REGION, 2021

4 PREMIUM INSIGHTS

- 4.1 ATTRACTIVE OPPORTUNITIES FOR PROTEIN HYDROLYSIS ENZYMES MARKET PLAYERS
- FIGURE 13 GROWING CONSUMPTION OF PROTEIN COUPLED WITH RISING HEALTH AWARENESS AMONG END CONSUMERS TO DRIVE MARKET
- 4.2 PROTEIN HYDROLYSIS ENZYMES MARKET: GROWTH RATE OF MAJOR REGIONAL SUBMARKETS
- FIGURE 14 US WAS LARGEST MARKET GLOBALLY FOR PROTEIN HYDROLYSIS ENZYMES IN 2021
- 4.3 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION & COUNTRY
- FIGURE 15 CHINA TO ACCOUNT FOR LARGEST SHARE IN ASIA PACIFIC MARKET IN 2022
- 4.4 PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION
- FIGURE 16 PHARMACEUTICALS TO DOMINATE PROTEIN HYDROLYSIS ENZYMES MARKET
- 4.5 PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE
- FIGURE 17 MICROORGANISM-BASED ENZYMES TO DOMINATE PROTEIN HYDROLYSIS ENZYMES MARKET DURING FORECAST PERIOD

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 18 MARKET DYNAMICS: PROTEIN HYDROLYSIS ENZYMES MARKET

5.2.1 DRIVERS

5.2.1.1 Increase in consumption of protein, coupled with rise in health awareness among end consumers

FIGURE 19 GLOBAL PER CAPITA PROTEIN CONSUMPTION, BY REGION, 2000–2019 (GRAM/CAPITA)

5.2.1.2 Multiple applications in food sector

FIGURE 20 GLOBAL PER CAPITA MEAT CONSUMPTION, BY COUNTRY, 2021 (KILOGRAM/CAPITA)

TABLE 3 IMPORT AND EXPORT OF BAKERY PRODUCTS, BY COUNTRY, 2020 (USD BILLION)

5.2.1.3 Increase in prevalence of chronic diseases

FIGURE 21 NEW CANCER CASES, BY CANCER TYPE, 2020 (MILLION)

5.2.2 RESTRAINTS

5.2.2.1 Varying government regulations and standards

5.2.2.2 High entry barriers for new companies

5.2.3 OPPORTUNITIES

5.2.3.1 Rise in demand for natural and environment-friendly products

5.2.4 CHALLENGES

5.2.4.1 Side effects associated with certain proteases

6 INDUSTRY TRENDS

6.1 INTRODUCTION

6.2 TRENDS IMPACTING CUSTOMERS' BUSINESSES

6.3 VALUE CHAIN ANALYSIS

FIGURE 22 RESEARCH AND ENZYME DEVELOPMENT CONTRIBUTES MAXIMUM VALUE TO OVERALL WORTH OF PROTEIN HYDROLYSIS ENZYMES

6.4 TRADE ANALYSIS

6.4.1 ENZYMES

TABLE 4 TOP 10 EXPORTERS AND IMPORTERS OF ENZYMES, 2021 (USD THOUSAND)

6.5 TECHNOLOGY ANALYSIS

6.6 PATENT ANALYSIS

TABLE 5 LIST OF IMPORTANT PATENTS FOR PROTEIN HYDROLYSIS ENZYMES MARKET, 2019–2022

6.7 ECOSYSTEM MAP & SUPPLY CHAIN ANALYSIS

FIGURE 23 ENZYME DEVELOPMENT AND PRODUCTION PLAY A VITAL ROLE IN SUPPLY CHAIN

6.7.1 PROTEIN HYDROLYSIS ENZYMES: MARKET MAP

FIGURE 24 PROTEIN HYDROLYSIS ENZYMES ECOSYSTEM MAP

6.8 PORTER'S FIVE FORCES ANALYSIS

TABLE 6 PROTEIN HYDROLYSIS ENZYMES MARKET: PORTER'S FIVE FORCES ANALYSIS

FIGURE 25 PROTEIN HYDROLYSIS ENZYMES MARKET: PORTER'S FIVE FORCES ANALYSIS

6.8.1 THREAT FROM NEW ENTRANTS

6.8.2 THREAT FROM SUBSTITUTES

6.8.3 BARGAINING POWER OF SUPPLIERS

6.8.4 BARGAINING POWER OF BUYERS

6.8.5 INTENSITY OF COMPETITIVE RIVALRY

6.9 CASE STUDIES

6.9.1 DSM AND NOVOZYMES COLLABORATED TO ADDRESS GROWING FEED RAW MATERIAL PRICES

6.10 PRICING ANALYSIS

TABLE 7 AVERAGE SELLING PRICES OF PROTEIN HYDROLYSIS ENZYMES, BY APPLICATION, 2018–2022 (USD/KG)

TABLE 8 AVERAGE SELLING PRICES OF PROTEIN HYDROLYSIS ENZYMES, BY REGION, 2018–2022 (USD/KG)

6.11 TARIFF AND REGULATORY LANDSCAPE

6.11.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 9 LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

6.11.2 NORTH AMERICA

6.11.2.1 US

TABLE 10 PROTEASE PREPARATIONS APPROVED AS FOOD ADDITIVES LISTED IN 21 CFR 173 AND AFFIRMED AS GRAS IN 21 CFR 184

6.11.2.2 Canada

TABLE 11 CANADA: LIST OF PERMITTED FOOD ENZYMES

6.11.3 EUROPE

6.11.4 ASIA PACIFIC

6.11.4.1 China

6.11.4.2 India

6.11.4.3 Australia & New Zealand

6.12 KEY STAKEHOLDERS AND BUYING CRITERIA

6.12.1 KEY STAKEHOLDERS IN BUYING PROCESS

FIGURE 26 INFLUENCE OF STAKEHOLDERS ON BUYING MICROBIAL PRODUCTS

TABLE 12 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR MICROBIAL PRODUCTS

6.12.2 BUYING CRITERIA

FIGURE 27 KEY BUYING CRITERIA FOR TOP 3 APPLICATIONS

TABLE 13 KEY BUYING CRITERIA FOR TOP 3 APPLICATIONS

6.13 KEY CONFERENCES & EVENTS

TABLE 14 PROTEIN HYDROLYSIS ENZYMES MARKET: DETAILED LIST OF CONFERENCES & EVENTS, 2022–2023

7 PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE

7.1 INTRODUCTION

TABLE 15 TYPES OF PROTEASES ALONG WITH FUNCTIONAL GROUPS AND THEIR SOURCES

FIGURE 28 PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2021 VS. 2027 (USD MILLION)

TABLE 16 PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 17 PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

7.2 MICROORGANISMS

7.2.1 SUSTAINABILITY OFFERED TO DRIVE DEMAND FOR MICROORGANISM-BASED ENZYMES

TABLE 18 MICROORGANISM-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 19 MICROORGANISM-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION, 2022–2027 (USD MILLION)

7.3 ANIMALS

7.3.1 TRYPSIN

7.3.1.1 Significance in hydrolysis of food proteins to fuel demand

7.3.2 CHYMOTRYPSIN

7.3.2.1 Applications in pharmaceutical sector to drive demand

7.3.3 PEPSIN

7.3.3.1 Rise in demand from food, pharmaceutical, and leather industries

7.3.4 PANCREATIN

7.3.4.1 Demand in treating pancreatic deficiencies to propel growth

TABLE 20 ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY

REGION, 2018–2021 (USD MILLION)

TABLE 21 ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION, 2022–2027 (USD MILLION)

7.4 PLANTS

7.4.1 PAPAIN

7.4.1.1 Wide range of industrial applications to boost market traction

7.4.2 BROMELAIN

7.4.2.1 Extensive application in food industry to drive segment

7.4.3 OTHER PLANT PRODUCTS

TABLE 22 PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 23 PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION, 2022–2027 (USD MILLION)

8 PROTEIN HYDROLYSIS ENZYMES MARKET, BY METHOD OF PRODUCTION

8.1 INTRODUCTION

8.2 FERMENTATION

8.2.1 INCREASED PRODUCTION IN SHORTER PERIOD TO BOOST FERMENTATION METHOD

FIGURE 29 PRODUCTION OF ENZYMES BY FERMENTATION

TABLE 24 USE OF PROTEASES IN BREWING

8.3 EXTRACTION

8.3.1 APPLICATION PRODUCING ENZYMES FROM ANIMAL AND PLANTS TO DRIVE SEGMENT

9 PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT

9.1 INTRODUCTION

FIGURE 30 PROTEIN HYDROLYSIS ENZYMES MARKET, BY MICROBIAL PRODUCTS, 2021 VS. 2027 (USD MILLION)

TABLE 25 ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 26 ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 27 PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 28 PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 29 MICROBIAL PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 30 PROTEIN HYDROLYSIS ENZYMES MARKET, BY MICROBIAL PRODUCTS, 2022–2027 (USD MILLION)

9.2 ANIMAL PRODUCTS

9.2.1 TRYPSIN

9.2.1.1 Higher demand from leather industry to drive segment growth

TABLE 31 TRYPSIN MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 32 TRYPSIN MARKET, BY REGION, 2022–2027 (USD MILLION)

9.2.2 PEPSIN

9.2.2.1 Use as supplement in treating anemic conditions to drive segment

TABLE 33 PEPSIN MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 34 PEPSIN MARKET, BY REGION, 2022–2027 (USD MILLION)

9.2.3 RENIN

9.2.3.1 Applications in cheese making to drive segment growth

TABLE 35 RENIN MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 36 RENIN MARKET, BY REGION, 2022–2027 (USD MILLION)

9.2.4 OTHER ANIMAL PRODUCTS

TABLE 37 APPLICATIONS OF DIFFERENT PROTEIN HYDROLYSIS ENZYMES IN ANIMALS

TABLE 38 OTHER ANIMAL PRODUCTS MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 39 OTHER ANIMAL PRODUCTS MARKET, BY REGION, 2022–2027 (USD MILLION)

9.3 PLANT PRODUCTS

9.3.1 PAPAIN

9.3.1.1 Use in cell isolation procedures across industries to drive segment

TABLE 40 PAPAIN MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 41 PAPAIN MARKET, BY REGION, 2022–2027 (USD MILLION)

9.3.2 BROMELAIN

9.3.2.1 Growth in research and innovation for applications in pharmaceutical sector

TABLE 42 BROMELAIN MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 43 BROMELAIN MARKET, BY REGION, 2022–2027 (USD MILLION)

9.3.3 OTHER PLANT PRODUCTS

TABLE 44 OTHER PLANT PRODUCTS MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 45 OTHER PLANT PRODUCTS MARKET, BY REGION, 2022–2027 (USD MILLION)

9.4 MICROBIAL PRODUCTS

9.4.1 ALKALINE PROTEASES

9.4.1.1 Growth in R&D on alkaline proteases to boost segment growth

TABLE 46 ALKALINE PROTEASES MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 47 ALKALINE PROTEASES MARKET, BY REGION, 2022–2027 (USD MILLION)

9.4.2 ACID PROTEASES

9.4.2.1 Acid proteases used to enhance bioethanol yields

TABLE 48 ACID PROTEASES MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 49 ACID PROTEASES MARKET, BY REGION, 2022–2027 (USD MILLION)

9.4.3 NEUTRAL PROTEASES

9.4.3.1 Neutral proteases offer broad range of substrate specificity and variety

TABLE 50 NEUTRAL PROTEASES MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 51 NEUTRAL PROTEASES MARKET, BY REGION, 2022–2027 (USD MILLION)

9.4.4 OTHER MICROBIAL PRODUCTS

TABLE 52 OTHER MICROBIAL PRODUCTS MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 53 OTHER MICROBIAL PRODUCTS MARKET, BY REGION, 2022–2027 (USD MILLION)

10 PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION

10.1 INTRODUCTION

FIGURE 31 PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2021 VS. 2027 (USD MILLION)

FIGURE 32 PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2021 VS. 2027 (METRIC TON)

TABLE 54 PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 55 PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 56 PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (METRIC TON)

TABLE 57 PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (METRIC TON)

10.2 DETERGENTS

10.2.1 HIGH ACTIVITY AND STABILITY OVER A WIDE RANGE OF

TEMPERATURES TO BOOST APPLICATIONS IN DETERGENTS

TABLE 58 DETERGENT APPLICATIONS MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 59 DETERGENT APPLICATIONS MARKET, BY REGION, 2022–2027 (USD MILLION)

TABLE 60 DETERGENT APPLICATIONS MARKET, BY REGION, 2018–2021 (METRIC TON)

TABLE 61 DETERGENT APPLICATIONS MARKET, BY REGION, 2022–2027 (METRIC TON)

10.3 PHARMACEUTICALS

10.3.1 DEMAND FOR ALTERNATIVES TO TRADITIONAL ANTIBIOTICS TO BOOST SEGMENT

TABLE 62 PHARMACEUTICAL APPLICATIONS MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 63 PHARMACEUTICAL APPLICATIONS MARKET, BY REGION, 2022–2027 (USD MILLION)

TABLE 64 PHARMACEUTICAL APPLICATIONS MARKET, BY REGION, 2018–2021 (METRIC TON)

TABLE 65 PHARMACEUTICAL APPLICATIONS MARKET, BY REGION, 2022–2027 (METRIC TON)

10.4 FOOD

10.4.1 DEMAND FOR IMPROVED FLAVOR AND TEXTURE OF FOOD TO FUEL SEGMENT GROWTH

TABLE 66 APPLICATIONS OF VARIOUS PROTEASES IN FOOD

TABLE 67 FOOD APPLICATIONS MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 68 FOOD APPLICATIONS MARKET, BY REGION, 2022–2027 (USD MILLION)

TABLE 69 FOOD APPLICATIONS MARKET, BY REGION, 2018–2021 (METRIC TON)

TABLE 70 FOOD APPLICATIONS MARKET, BY REGION, 2022–2027 (METRIC TON)

10.5 TEXTILES & LEATHER

10.5.1 NEED FOR DECREASED PROCESSING TIME AND ENHANCED MATERIAL QUALITY TO PROPEL SEGMENT

TABLE 71 TEXTILES & LEATHER APPLICATIONS MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 72 TEXTILES & LEATHER APPLICATIONS MARKET, BY REGION, 2022–2027 (USD MILLION)

TABLE 73 TEXTILES & LEATHER APPLICATIONS MARKET, BY REGION, 2018–2021 (METRIC TON)

TABLE 74 TEXTILES & LEATHER APPLICATIONS MARKET, BY REGION, 2022–2027 (METRIC TON)

10.6 OTHER APPLICATIONS

10.6.1 FEED

10.6.2 SILVER RECOVERY

TABLE 75 OTHER APPLICATIONS MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 76 OTHER APPLICATIONS MARKET, BY REGION, 2022–2027 (USD MILLION)

TABLE 77 OTHER APPLICATIONS MARKET, BY REGION, 2018–2021 (METRIC TON)

TABLE 78 OTHER APPLICATIONS MARKET, BY REGION, 2022–2027 (METRIC TON)

11 PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION

11.1 INTRODUCTION

TABLE 79 PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION, 2018–2021 (USD MILLION)

TABLE 80 PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION, 2022–2027 (USD MILLION)

TABLE 81 PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION, 2018–2021 (METRIC TON)

TABLE 82 PROTEIN HYDROLYSIS ENZYMES MARKET, BY REGION, 2022–2027 (METRIC TON)

FIGURE 33 PROTEIN HYDROLYSIS ENZYMES MARKET, BY KEY COUNTRY, CAGR (2022–2027)

11.2 NORTH AMERICA

FIGURE 34 NORTH AMERICA: ENZYMES MARKET SNAPSHOT

TABLE 83 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2018–2021 (USD MILLION)

TABLE 84 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 85 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2018–2021 (METRIC TON)

TABLE 86 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2022–2027 (METRIC TON)

TABLE 87 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 88 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 89 NORTH AMERICA: ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 90 NORTH AMERICA: ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 91 NORTH AMERICA: PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 92 NORTH AMERICA: PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 93 NORTH AMERICA: MICROBIAL PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 94 NORTH AMERICA: MICROBIAL PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 95 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 96 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 97 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (METRIC TON)

TABLE 98 NORTH AMERICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (METRIC TON)

11.2.1 US

11.2.1.1 High demand from textile and pharmaceutical sectors to boost market

TABLE 99 US: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 100 US: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 101 US: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 102 US: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.2.2 CANADA

11.2.2.1 Regulatory approval of proteases from *Bacillus* species in food applications to augment market growth

TABLE 103 CANADA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 104 CANADA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 105 CANADA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 106 CANADA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.2.3 MEXICO

11.2.3.1 Growing demand from food industry to boost market

TABLE 107 MEXICO: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 108 MEXICO: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 109 MEXICO: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 110 MEXICO: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.3 EUROPE

TABLE 111 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2018–2021 (USD MILLION)

TABLE 112 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 113 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2018–2021 (METRIC TON)

TABLE 114 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2022–2027 (METRIC TON)

TABLE 115 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 116 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 117 EUROPE: ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 118 EUROPE: ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 119 EUROPE: PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 120 EUROPE: PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 121 EUROPE: MICROBIAL PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 122 EUROPE: MICROBIAL PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 123 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 124 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 125 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (METRIC TON)

TABLE 126 EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (METRIC TON)

11.3.1 GERMANY

11.3.1.1 Rise in demand from baking industry in Germany

TABLE 127 GERMANY: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 128 GERMANY: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 129 GERMANY: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 130 GERMANY: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.3.2 FRANCE

11.3.2.1 Extensive application of proteases in French clothing industry

TABLE 131 FRANCE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 132 FRANCE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 133 FRANCE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 134 FRANCE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.3.3 UK

11.3.3.1 Varied applications in food industry to influence market growth

TABLE 135 UK: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 136 UK: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 137 UK: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 138 UK: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.3.4 SPAIN

11.3.4.1 Rise in demand for meat and meat products to boost demand

TABLE 139 SPAIN: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE,

2018–2021 (USD MILLION)

TABLE 140 SPAIN: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 141 SPAIN: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 142 SPAIN: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.3.5 ITALY

11.3.5.1 Multifunctionality of proteases to boost applications in Italian textile & leather industry

TABLE 143 ITALY: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 144 ITALY: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 145 ITALY: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 146 ITALY: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.3.6 DENMARK

11.3.6.1 Increased demand from food processing industries to drive market

TABLE 147 DENMARK: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 148 DENMARK: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 149 DENMARK: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 150 DENMARK: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.3.7 REST OF EUROPE

TABLE 151 REST OF EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 152 REST OF EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 153 REST OF EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 154 REST OF EUROPE: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.4 ASIA PACIFIC

TABLE 155 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY

COUNTRY, 2018–2021 (USD MILLION)

TABLE 156 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 157 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2018–2021 (METRIC TON)

TABLE 158 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2022–2027 (METRIC TON)

TABLE 159 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 160 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 161 ASIA PACIFIC: ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 162 ASIA PACIFIC: ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 163 ASIA PACIFIC: PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 164 ASIA PACIFIC: PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 165 ASIA PACIFIC: MICROBIAL PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 166 ASIA PACIFIC: MICROBIAL PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 167 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 168 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 169 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (METRIC TON)

TABLE 170 ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (METRIC TON)

11.4.1 CHINA

11.4.1.1 Rise in investments in R&D to drive Chinese market growth

TABLE 171 CHINA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 172 CHINA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 173 CHINA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 174 CHINA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.4.2 INDIA

11.4.2.1 Demand from pharmaceutical sector to drive Indian market

TABLE 175 INDIA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 176 INDIA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 177 INDIA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 178 INDIA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.4.3 JAPAN

11.4.3.1 Advancements in pharmaceutical sector to boost market growth

TABLE 179 JAPAN: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 180 JAPAN: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 181 JAPAN: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 182 JAPAN: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.4.4 SOUTH KOREA

11.4.4.1 Innovations in healthcare with incorporation of proteases to drive market growth

TABLE 183 SOUTH KOREA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 184 SOUTH KOREA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 185 SOUTH KOREA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 186 SOUTH KOREA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.4.5 AUSTRALIA & NEW ZEALAND

11.4.5.1 Increase in demand for alcohol and winemaking to propel market demand

TABLE 187 AUSTRALIA & NEW ZEALAND: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 188 AUSTRALIA & NEW ZEALAND: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 189 AUSTRALIA & NEW ZEALAND: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 190 AUSTRALIA & NEW ZEALAND: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.4.6 REST OF ASIA PACIFIC

TABLE 191 REST OF ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 192 REST OF ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 193 REST OF ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 194 REST OF ASIA PACIFIC: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.5 REST OF THE WORLD (ROW)

TABLE 195 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2018–2021 (USD MILLION)

TABLE 196 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 197 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2018–2021 (METRIC TON)

TABLE 198 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY COUNTRY, 2022–2027 (METRIC TON)

TABLE 199 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 200 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 201 ROW: ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 202 ROW: ANIMAL-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 203 ROW: PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 204 ROW: PLANT-BASED PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 205 ROW: MICROBIAL PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2018–2021 (USD MILLION)

TABLE 206 ROW: MICROBIAL PROTEIN HYDROLYSIS ENZYMES MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 207 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION,

2018–2021 (USD MILLION)

TABLE 208 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 209 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (METRIC TON)

TABLE 210 ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (METRIC TON)

11.5.1 BRAZIL

11.5.1.1 Government policies for biofuel production to drive demand

TABLE 211 BRAZIL: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 212 BRAZIL: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 213 BRAZIL: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 214 BRAZIL: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.5.2 ARGENTINA

11.5.2.1 Rise in demand from dairy industry to propel market growth

TABLE 215 ARGENTINA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 216 ARGENTINA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 217 ARGENTINA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 218 ARGENTINA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.5.3 SOUTH AFRICA

11.5.3.1 Growth potential of South African pharmaceutical and detergent industry to drive market

TABLE 219 SOUTH AFRICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 220 SOUTH AFRICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 221 SOUTH AFRICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 222 SOUTH AFRICA: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

11.5.4 OTHERS IN ROW

TABLE 223 OTHERS IN ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2018–2021 (USD MILLION)

TABLE 224 OTHERS IN ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY SOURCE, 2022–2027 (USD MILLION)

TABLE 225 OTHERS IN ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 226 OTHERS IN ROW: PROTEIN HYDROLYSIS ENZYMES MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

12 COMPETITIVE LANDSCAPE

12.1 OVERVIEW

12.2 MARKET EVALUATION FRAMEWORK

FIGURE 35 MARKET EVALUATION FRAMEWORK, JANUARY 2019–SEPTEMBER 2022

12.3 MARKET SHARE ANALYSIS

TABLE 227 PROTEIN HYDROLYSIS ENZYMES MARKET SHARE ANALYSIS, 2021

12.4 RANKING OF KEY PLAYERS

12.5 REVENUE ANALYSIS OF MAJOR MARKET PLAYERS

FIGURE 36 REVENUE ANALYSIS OF MAJOR MARKET PLAYERS, 2019–2021 (USD BILLION)

12.6 COMPANY EVALUATION QUADRANT (KEY PLAYERS)

12.6.1 STARS

12.6.2 EMERGING LEADERS

12.6.3 PERVASIVE PLAYERS

12.6.4 PARTICIPANTS

FIGURE 37 KEY PLAYERS COMPANY EVALUATION QUADRANT, 2022

12.6.4.1 COMPETITIVE BENCHMARKING

TABLE 228 PROTEIN HYDROLYSIS ENZYMES MARKET: COMPETITIVE BENCHMARKING OF KEY PLAYERS, BY SOURCE

TABLE 229 PROTEIN HYDROLYSIS ENZYMES MARKET: COMPETITIVE BENCHMARKING OF KEY PLAYERS, BY PRODUCT

TABLE 230 PROTEIN HYDROLYSIS ENZYMES MARKET: COMPETITIVE BENCHMARKING OF KEY PLAYERS, BY APPLICATION

TABLE 231 PROTEIN HYDROLYSIS ENZYMES MARKET: COMPETITIVE BENCHMARKING OF KEY PLAYERS, BY REGION

TABLE 232 PROTEIN HYDROLYSIS ENZYMES MARKET: COMPETITIVE BENCHMARKING OF KEY PLAYERS, OVERALL FOOTPRINT

12.7 STARTUP EVALUATION QUADRANT

12.7.1 PROGRESSIVE COMPANIES

12.7.2 STARTING BLOCKS

12.7.3 RESPONSIVE COMPANIES

12.7.4 DYNAMIC COMPANIES

FIGURE 38 SME/STARTUP EVALUATION QUADRANT, 2022

12.7.4.1 COMPETITIVE BENCHMARKING

TABLE 233 PROTEIN HYDROLYSIS ENZYMES MARKET: DETAILED LIST OF SMES

12.8 COMPETITIVE SCENARIO

12.8.1 PRODUCT LAUNCHES

TABLE 234 PROTEIN HYDROLYSIS ENZYMES MARKET: PRODUCT LAUNCHES, 2019–2021

12.8.2 DEALS

TABLE 235 PROTEIN HYDROLYSIS ENZYMES MARKET: DEALS, 2019–2022

12.8.3 OTHER DEVELOPMENTS

TABLE 236 PROTEIN HYDROLYSIS ENZYMES MARKET: OTHER DEVELOPMENTS, 2020

13 COMPANY PROFILES

(Business overview, Products offered, Recent Developments, MNM view)*

13.1 KEY PLAYERS

13.1.1 NOVOZYMES

TABLE 237 NOVOZYMES: BUSINESS OVERVIEW

FIGURE 39 NOVOZYMES: COMPANY SNAPSHOT

TABLE 238 NOVOZYMES: PRODUCTS OFFERED

TABLE 239 NOVOZYMES: PRODUCT LAUNCHES

TABLE 240 NOVOZYMES: DEALS

13.1.2 ASSOCIATED BRITISH FOODS

TABLE 241 ASSOCIATED BRITISH FOODS: BUSINESS OVERVIEW

FIGURE 40 ASSOCIATED BRITISH FOODS: COMPANY SNAPSHOT

TABLE 242 ASSOCIATED BRITISH FOODS: PRODUCTS OFFERED

TABLE 243 ASSOCIATED BRITISH FOODS: PRODUCT LAUNCHES

TABLE 244 ASSOCIATED BRITISH FOODS: DEALS

13.1.3 DSM

TABLE 245 DSM: BUSINESS OVERVIEW

FIGURE 41 DSM: COMPANY SNAPSHOT

TABLE 246 DSM: PRODUCTS OFFERED

TABLE 247 DSM: DEALS

13.1.4 DUPONT

TABLE 248 DUPONT: BUSINESS OVERVIEW

FIGURE 42 DUPONT: COMPANY SNAPSHOT

TABLE 249 DUPONT: PRODUCTS OFFERED

13.1.5 BASF SE

TABLE 250 BASF SE: BUSINESS OVERVIEW

FIGURE 43 BASF SE: COMPANY SNAPSHOT

TABLE 251 BASF SE: PRODUCTS OFFERED

TABLE 252 BASF SE: DEALS

TABLE 253 BASF SE: OTHER DEVELOPMENTS

13.1.6 ADVANCED ENZYME TECHNOLOGIES

TABLE 254 ADVANCED ENZYME TECHNOLOGIES: BUSINESS OVERVIEW

FIGURE 44 ADVANCED ENZYME TECHNOLOGIES: COMPANY SNAPSHOT

TABLE 255 ADVANCED ENZYME TECHNOLOGIES: PRODUCTS OFFERED

13.1.7 DYADIC INTERNATIONAL, INC.

TABLE 256 DYADIC INTERNATIONAL, INC.: BUSINESS OVERVIEW

FIGURE 45 DYADIC INTERNATIONAL, INC.: COMPANY SNAPSHOT

TABLE 257 DYADIC INTERNATIONAL, INC.: PRODUCTS OFFERED

TABLE 258 DYADIC INTERNATIONAL, INC.: DEALS

13.1.8 CHR. HANSEN HOLDING A/S

TABLE 259 CHR. HANSEN HOLDING A/S: BUSINESS OVERVIEW

FIGURE 46 CHR. HANSEN HOLDING A/S: COMPANY SNAPSHOT

TABLE 260 CHR. HANSEN HOLDING A/S: PRODUCTS OFFERED

TABLE 261 CHR. HANSEN HOLDING A/S: PRODUCT LAUNCHES

13.1.9 AMANO ENZYME

TABLE 262 AMANO ENZYME: BUSINESS OVERVIEW

TABLE 263 AMANO ENZYME: PRODUCTS OFFERED

TABLE 264 AMANO ENZYME: PRODUCT LAUNCHES

13.1.10 SPECIALTY ENZYMES & BIOTECHNOLOGIES

TABLE 265 SPECIALTY ENZYMES & BIOTECHNOLOGIES: BUSINESS OVERVIEW

TABLE 266 SPECIALTY ENZYMES & BIOTECHNOLOGIES: PRODUCTS OFFERED

13.1.11 CREATIVE ENZYMES

TABLE 267 CREATIVE ENZYMES: BUSINESS OVERVIEW

TABLE 268 CREATIVE ENZYMES: PRODUCTS OFFERED

13.1.12 JIANGSU BOLI BIOPRODUCTS CO., LTD

TABLE 269 JIANGSU BOLI BIOPRODUCTS CO., LTD: BUSINESS OVERVIEW

TABLE 270 JIANGSU BOLI BIOPRODUCTS CO., LTD: PRODUCTS OFFERED

13.1.13 BIOCATALYSTS

TABLE 271 BIOCATALYSTS: BUSINESS OVERVIEW

TABLE 272 BIOCATALYSTS: PRODUCTS OFFERED

TABLE 273 BIOCATALYSTS: PRODUCT LAUNCHES

13.1.14 AUMGENE BIOSCIENCES

TABLE 274 AUMGENE BIOSCIENCES: BUSINESS OVERVIEW**TABLE 275 AUMGENE BIOSCIENCES: PRODUCTS OFFERED**

13.1.15 MERCK KGAA

TABLE 276 MERCK KGAA: BUSINESS OVERVIEW**FIGURE 47 MERCK KGAA: COMPANY SNAPSHOT****TABLE 277 MERCK KGAA: PRODUCTS OFFERED**

13.1.16 BIOSEUTICA

TABLE 278 BIOSEUTICA: BUSINESS OVERVIEW**TABLE 279 BIOSEUTICA: PRODUCTS OFFERED**

13.1.17 ROSSARI BIOTECH LIMITED

TABLE 280 ROSSARI BIOTECH LIMITED: BUSINESS OVERVIEW**TABLE 281 ROSSARI BIOTECH LIMITED: PRODUCTS OFFERED**

*Details on Business overview, Products offered, Recent Developments, MNM view might not be captured in case of unlisted companies.

14 ADJACENT AND RELATED MARKETS

14.1 INTRODUCTION

TABLE 282 ADJACENT MARKETS TO THE PROTEIN HYDROLYSIS ENZYMES MARKET

14.2 ENZYMES MARKET

14.2.1 MARKET DEFINITION

14.2.2 MARKET OVERVIEW

TABLE 283 ENZYMES MARKET, BY PRODUCT TYPE, 2017–2025 (USD MILLION)

14.3 FOOD ENZYMES MARKET

14.3.1 MARKET DEFINITION

14.3.2 MARKET OVERVIEW

TABLE 284 FOOD ENZYMES MARKET, BY TYPE, 2016–2020 (USD MILLION)**TABLE 285 FOOD ENZYMES MARKET, BY TYPE, 2021–2026 (USD MILLION)****15 APPENDIX**

15.1 DISCUSSION GUIDE

15.2 KNOWLEDGESTORE: MARKETSDANDMARKETS' SUBSCRIPTION PORTAL

15.3 CUSTOMIZATION OPTIONS

15.4 RELATED REPORTS

15.5 AUTHOR DETAILS

About

The enzymes which are very specific to protein hydrolysis are proteases which are classified under the “hydrolases group”. Proteases refer to a group of enzymes whose catalytic function is to hydrolyze (breakdown) proteins. They are also called proteolytic enzymes or systemic enzymes. Proteases are classified into two major groups: exopeptidases (peptidases) and endopeptidases (proteinases). The peptidases hydrolyze the protein from C- or N-terminus releasing a single amino acid while endopeptidases, as the name suggests, hydrolyzes the peptide bond in the center of the amino acid chain. Further, the proteases are also classified into alkaline, acid, and neutral proteases based on their pH optimum activity. On the basis of the functional group present at the catalytic site, these proteases are classified as serine proteases, cysteine proteases, aspartic proteases, threonine proteases, glutamic acid proteases, and metalloproteases.

Proteases represent one of the three largest groups of industrial enzymes; others being the amylases and lipases.

Proteases enzymes mainly find their applications in detergents, leather, food, pharmaceutical industries, and bioremediation processes.

Microbial sources are the most preferred sources for the production of proteases enzymes. Proteases enzymes are majorly used in the detergent industry followed by pharmaceuticals and food respectively.

The report titled Protein Hydrolysis Enzymes Market: BY GEOGRAPHY (North America, Europe, Asia–Pacific, ROW), BY SOURCES (Microorganisms, Animals and Plants) and BY APPLICATION (Detergent and Cleaning Industry, Pharmaceuticals, Food Industry and others) – Global trends and forecasts to 2019 provides an in-depth analysis of the global protein hydrolysis enzymes market with a comprehensive coverage of the demand of protein hydrolysis enzymes across the globe in terms of value and volume .The key market challenges recognized by the analysts and the major trends of the protein hydrolysis enzymes market are presented in the report. The report also includes the competitive landscape of the leading players of the global protein hydrolysis enzymes market with respect to their key developments, manufacturing locations, and business strategies.

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