

The Global Biochemicals Market 2026-2036

<https://marketpublishers.com/r/GBB5EB400507EN.html>

Date: September 2025

Pages: 374

Price: US\$ 1,400.00 (Single User License)

ID: GBB5EB400507EN

Abstracts

The global biochemicals market represents one of the most dynamic and rapidly evolving sectors in modern chemistry, experiencing unprecedented growth driven by sustainability imperatives, technological advances, and shifting consumer preferences. The biochemicals market encompasses diverse applications across multiple industries, with packaging leading as the dominant sector. Packaging applications, driven by plastic waste reduction initiatives and circular economy principles, account for the largest market share. The automotive industry represents another significant growth area, primarily driven by lightweighting requirements and stringent carbon emission regulations. Textiles, construction, electronics, consumer goods, agriculture, and pharmaceuticals each contribute substantial market segments, with pharmaceuticals commanding premium pricing due to specialized quality requirements despite representing the smallest absolute volumes.

Multiple convergent trends accelerate biochemicals adoption across industries. Sustainability mandates from governments and corporations create strong demand for bio-based alternatives to petrochemicals. Technological advancements in synthetic biology, metabolic engineering, and automation enable production of increasingly complex biochemicals with enhanced properties and improved cost competitiveness. Consumer preferences increasingly favour environmentally responsible products, supporting premium pricing for sustainable alternatives. Government support through policies, incentives, and research funding further accelerates market development.

The industry confronts significant challenges including cost competitiveness with established petrochemical alternatives, technical performance gaps, complex regulatory approval processes, and substantial capital requirements for scaling production. Production costs often exceed conventional alternatives by 20-100%, depending on product complexity and scale. However, substantial opportunities exist through expanding applications, feedstock diversification, circular economy integration, and

development of bio-based versions of key chemical building blocks.

The biochemicals market's future appears exceptionally promising, with continued technological advancement expected to enable production of wider ranges of biochemicals with enhanced properties. Feedstock diversification toward non-food biomass sources will address sustainability concerns while expanding raw material options. Integration with circular economy principles will drive development of biodegradable and recyclable biochemicals. As production scales increase and processes become more efficient, cost competitiveness with petrochemical alternatives will improve, supported by potential carbon pricing mechanisms and regulatory preferences for sustainable materials. Industry consolidation through mergers and acquisitions will likely accelerate as established companies seek innovative technologies and biotechnology firms require resources for commercial-scale production, ultimately transforming large segments of the global chemical industry toward biological manufacturing platforms.

The Global Biochemicals Market 2026-2036 represents the definitive strategic intelligence resource for understanding one of the world's fastest-growing industrial sectors. This comprehensive market analysis provides critical insights into the biotechnology revolution transforming chemical manufacturing, offering detailed coverage of market dynamics, technological innovations, competitive landscapes, and future growth opportunities across the global biochemicals ecosystem.

As sustainability imperatives reshape industrial priorities and biotechnology capabilities advance rapidly, the biochemicals market emerges as a cornerstone of the circular economy transition. This report delivers essential intelligence for investors, manufacturers, technology developers, and strategic decision-makers seeking to capitalize on the unprecedented growth opportunities within bio-based chemical production. From organic acids and platform chemicals to specialty biopolymers and precision fermentation products, our analysis covers the complete spectrum of biochemical applications driving market transformation.

The report combines quantitative market forecasts with qualitative strategic analysis, providing revenue projections through 2036 across multiple segmentation frameworks including product types, applications, regional markets, and technology readiness levels. Our comprehensive company profiling section examines over 245 key market participants, from established chemical giants to innovative biotechnology start-ups, offering unparalleled visibility into competitive positioning and strategic initiatives shaping market evolution.

Report contents include:

Comprehensive biochemical market landscape analysis and growth trajectory assessment

Market size projections and revenue forecasts by product category (2026-2036)

Key market drivers, challenges, and opportunities across global biochemicals ecosystem

Strategic implications for industry stakeholders and investment priorities

Biomanufacturing Technologies and Production Systems

Detailed analysis of microbial fermentation, mammalian cell culture, and plant-based production

Advanced biomanufacturing technologies including synthetic biology tools and CRISPR-Cas9 systems

Production scale analysis from laboratory to commercial-scale operations

Process optimization strategies and automation applications in biotechnology

Alternative feedstock utilization including C1/C2 feedstocks and lignocellulosic biomass

Comprehensive coverage of host organisms and cell factory platforms

Technology and Materials Analysis

In-depth examination of over 50 biochemical product categories and applications

Organic acids market analysis including lactic acid, succinic acid, and citric acid production

Amino acids and vitamins produced through biotechnology processes

Bio-based alcohols, surfactants, and specialty solvents market assessment

Comprehensive coverage of flavors, fragrances, and bio-manufactured aromatics

Bio-based monomers, intermediates, and polymer production technologies

Beauty and personal care biochemicals including hyaluronic acid and collagen

Waste-to-chemicals conversion technologies and circular economy applications

Market Analysis and Strategic Intelligence

Competitive landscape analysis and key player positioning strategies

Market growth drivers and biotechnology trends shaping industry evolution

Government support mechanisms and regulatory framework assessment

Value chain analysis and economic viability factors

Technology readiness levels and commercialization pathways

Addressable market size analysis across multiple industry segments

Risk assessment and opportunity identification framework

Major market challenges and technical hurdle mitigation strategies

Global revenue forecasts by type, application, and regional markets

Regional Market Dynamics

Comprehensive geographic analysis covering North America, Europe, Asia-Pacific markets

Regional production capacity assessments and supply chain considerations

Government policy impacts and regulatory environment variations

Market penetration strategies and regional growth opportunities

Industry Applications and End-Use Markets

Packaging industry transformation through sustainable biochemical solutions

Automotive sector adoption of bio-based materials and lightweighting strategies

Textile industry integration of biochemical fibers and processing chemicals

Construction industry utilization of bio-based building materials

Electronics sector applications and miniaturization technology requirements

Consumer goods market penetration and brand positioning strategies

Company Profiles. This report features comprehensive profiles of 245+ leading companies shaping the global biochemicals market, including: Aanika Biosciences, Absci Corp, Aemetis Inc, AEP Polymers, Afyren, AGAE Technologies LLC, Again Bio, AgBiome, AgriSea NZ Seaweed Ltd, Agrivida, ?IO, Algal Bio Co Ltd, Algenol, AlgiKnit, Alginor ASA, Allied Carbon Solutions, Alpha Biofuels Singapore Pte Ltd, Allonnia LLC, Allozymes, Alt.Leather, Amano Enzyme Inc, AmphiStar, Anellotech Inc, Anqing He Xing Chemical Co Ltd, Apeel Sciences, Aralez Bio, Archer Daniel Midland Company (ADM), Ardra Bio, Arzeda Corp, AVA Biochem AG, Avantium BV, Ayas Renewables Inc, Azolla,

BASF, BBCA Biochemical & GALACTIC Lactic Acid Co Ltd, Benefuel Inc, Biocatalysts Ltd, Bioextrax AB, Biokemik, BIOLO, Biomason Inc, BioSmart Nano, Biosyntia, Biotensidion GmbH, Biotic Circular Technologies Ltd, Bioweg, BJ BIOCHEM Inc, Bloom Biorenewables SA, BluCon Biotech GmbH, Blue BioFuels Inc, Bluepha Beijing Lanjing Microbiology Technology Co Ltd, Boreal Bioproducts, Bosk Bioproducts Inc, Bowil Biotech Sp z oo, Braskem SA, Brightseed, Bucha Bio Inc, C16 Biosciences, C1 Green Chemicals AG, CABIO Biotech Wuhan Co Ltd, Calysta, Capra Biosciences, Cargill, Catalyxx, Cathay Industrial Biotech Ltd, ChainCraft, Chempolis Oy, Chitose Bio Evolution Pte Ltd, Chongqing Bofei Biochemical Products Co Ltd, CIMV, CinderBio, Circa Group, Circe, CJ Biomaterials Inc, Clariant, Clean Food Group, Colorifix, Colipi, Conagen, Croda International PLC, CyanoCapture, Cysbio, Debut Biotechnology, Deep Branch Biotechnology, Demetrix, Dispersa, Domsj? Fabriker AB, Dongying Hebang Chemical Corp, DuPont, Ecovative Design LLC, Eco Fuel Technology Inc, Eden Brew, EggPlant Srl, Elemental Enzymes Inc, Emerging Fuels Technology (EFT), enaDyne GmbH, EnginZyme AB, eniferBio, Eni SpA, Enzymaster, Enzymit, Enzyan Biocatalysis GmbH, Epoch Biodesign, Eversyn, Evonik Industries AG, EV Biotech, FabricNano, Fermentalg, Fermelanta, FlexSea, Fortum, FP Innovations, Futerro, Future Fields, Futurity Bio-Ventures Ltd, Gaiamer Biotechnologies, Gen3Bio, Genecis Bioindustries Inc, Geno, Gevo Inc, Ginkgo Bioworks, Givaudan SA, Green Earth Institute, plus over 150 additional companies spanning the complete biochemicals value chain from feedstock suppliers to end-use applications.

Contents

1 EXECUTIVE SUMMARY

1.1 Overview

1.2 Types

1.2.1 Organic Acids

1.2.1.1 Lactic Acid

1.2.1.2 Citric Acid

1.2.1.3 Succinic Acid

1.2.2 Platform Chemicals

1.2.2.1 1,4-Butanediol

1.2.2.2 1,3-Propanediol

1.2.2.3 Glycerol

1.2.3 Alcohols

1.2.3.1 Bioethanol

1.2.3.2 Butanol

1.2.4 Natural Products

1.2.4.1 Terpenes

1.2.4.2 Polyphenols

1.2.5 Proteins/Enzymes

1.2.5.1 Industrial Enzymes

1.2.5.2 Therapeutic Proteins

1.2.6 Specialty Chemicals

1.2.6.1 Natural Dyes

1.2.6.2 Biosurfactants

1.2.6.3 Biopolymers

2 BIOMANUFACTURING

2.1 Microbial Fermentation

2.2 Mammalian Cell Culture

2.3 Plant Cell Culture

2.4 Insect Cell Culture

2.5 Transgenic Animals

2.6 Transgenic Plants

2.7 Technologies

2.7.1 Upstream Processing

2.7.1.1 Cell Culture

- 2.7.2 Fermentation
 - 2.7.2.1 Overview
- 2.7.3 Downstream Processing
 - 2.7.3.1 Purification
- 2.7.4 Formulation
 - 2.7.4.1 Overview
- 2.7.5 Bioprocess Development
 - 2.7.5.1 Scale-up
 - 2.7.5.2 Optimization
- 2.7.6 Analytical Methods
 - 2.7.6.1 Quality Control
 - 2.7.6.2 Characterization
- 2.7.7 Synthetic Biology Tools and Techniques
 - 2.7.7.1 DNA synthesis
 - 2.7.7.2 CRISPR-Cas9 systems
 - 2.7.7.3 Protein/enzyme engineering
 - 2.7.7.4 Computer-aided design
 - 2.7.7.5 Strain construction and optimization
 - 2.7.7.6 Robotics and automation
 - 2.7.7.7 Artificial intelligence and machine learning
- 2.7.8 Alternative Feedstocks and Sustainability
 - 2.7.8.1 C1 feedstocks: Metabolic pathways
 - 2.7.8.2 C2 feedstocks
 - 2.7.8.3 Lignocellulosic biomass feedstocks
 - 2.7.8.4 Blue biotechnology feedstocks
 - 2.7.8.5 Routes for carbon capture in biotechnology
- 2.8 Scale of Production
 - 2.8.1 Laboratory Scale
 - 2.8.1.1 Overview
 - 2.8.1.2 Scale and Equipment
 - 2.8.1.3 Advantages
 - 2.8.1.4 Disadvantages
 - 2.8.2 Pilot Scale
 - 2.8.2.1 Overview
 - 2.8.2.2 Scale and Equipment
 - 2.8.2.3 Advantages
 - 2.8.2.4 Disadvantages
 - 2.8.3 Commercial Scale
 - 2.8.3.1 Overview

- 2.8.3.2 Scale and Equipment
- 2.8.3.3 Advantages
- 2.8.3.4 Disadvantages
- 2.9 Mode of Operation
 - 2.9.1 Batch Production
 - 2.9.1.1 Overview
 - 2.9.1.2 Advantages
 - 2.9.1.3 Disadvantages
 - 2.9.1.4 Applications
 - 2.9.2 Fed-batch Production
 - 2.9.2.1 Overview
 - 2.9.2.2 Advantages
 - 2.9.2.3 Disadvantages
 - 2.9.2.4 Applications
 - 2.9.3 Continuous Production
 - 2.9.3.1 Overview
 - 2.9.3.2 Advantages
 - 2.9.3.3 Disadvantages
 - 2.9.3.4 Applications
 - 2.9.3.5 Key fermentation parameter comparison
 - 2.9.4 Cell factories for biomanufacturing
 - 2.9.4.1 Range of organisms
 - 2.9.4.2 Escherichia coli (E.coli)
 - 2.9.4.3 Corynebacterium glutamicum (C. glutamicum)
 - 2.9.4.4 Bacillus subtilis (B. subtilis)
 - 2.9.4.5 Saccharomyces cerevisiae (S. cerevisiae)
 - 2.9.4.6 Yarrowia lipolytica (Y. lipolytica)
 - 2.9.4.7 Non-model organisms
 - 2.9.5 Perfusion Culture
 - 2.9.5.1 Overview
 - 2.9.5.2 Advantages
 - 2.9.5.3 Disadvantages
 - 2.9.5.4 Applications
 - 2.9.5.5 Perfusion bioreactors
 - 2.9.6 Other Modes of Operation
 - 2.9.6.1 Immobilized Cell Culture
 - 2.9.6.2 Two-Stage Production
 - 2.9.6.3 Hybrid Systems
- 2.10 Host Organisms

3 TECHNOLOGY/MATERIALS ANALYSIS

3.1 Bio-based feedstocks

3.1.1 Plant-based feedstocks

3.1.2 Waste-based feedstocks

3.1.3 Microbial and mineral-based feedstocks

3.2 Organic acids

3.2.1 Lactic acid

3.2.1.1 D-lactic acid

3.2.1.2 L-lactic acid

3.2.2 Succinic acid

3.2.3 Itaconic acid

3.2.4 Citric acid

3.2.5 Acetic acid

3.3 Amino acids

3.3.1 Glutamic acid

3.3.2 Lysine

3.3.3 Threonine

3.3.4 Methionine

3.3.5 Vitamins produced using biotechnology

3.3.5.1 Vitamin B2 (Riboflavin)

3.3.5.2 Vitamin B12 (Cobalamin)

3.3.5.3 Vitamin C (Ascorbic Acid)

3.3.5.4 Vitamin B7 (Biotin)

3.3.5.5 Vitamin B3 (Niacin / Nicotinic Acid)

3.3.5.6 Vitamin B9 (Folic Acid / Folate)

3.4 Alcohols

3.4.1 Ethanol

3.4.2 Butanol

3.4.3 Isobutanol

3.4.4 Propanediol

3.5 Surfactants

3.5.1 Biosurfactants (e.g., rhamnolipids, sophorolipids)

3.5.1.1 Rhamnolipids

3.5.1.2 Sophorolipids

3.5.1.3 Mannosylerythritol lipids (MELs)

3.5.1.4 Cellobiose lipids

3.5.1.5 Designer glycolipids and lipopeptides via synthetic biology

- 3.5.2 Alkyl polyglucosides (APGs)
- 3.6 Solvents
 - 3.6.1 Ethyl lactate
 - 3.6.2 Dimethyl carbonate
 - 3.6.3 Glycerol
- 3.7 Flavours and fragrances
 - 3.7.1 Vanillin
 - 3.7.2 Nootkatone
 - 3.7.3 Limonene
 - 3.7.4 Bio-manufactured fragrances and aromatics
 - 3.7.5 Biotech-derived fragrance precursors
 - 3.7.6 Ambroxan
 - 3.7.7 Flavour enhancers
 - 3.7.8 Disodium Inosinate (IMP)
 - 3.7.9 Disodium Guanylate (GMP)
 - 3.7.10 Monatin
- 3.8 Bio-based monomers and intermediates
 - 3.8.1 Succinic acid
 - 3.8.2 1,4-Butanediol (BDO)
 - 3.8.3 Isoprene
 - 3.8.4 Ethylene
 - 3.8.5 Propylene
 - 3.8.6 Adipic acid
 - 3.8.7 Acrylic acid
 - 3.8.8 Sebacic acid
- 3.9 Bio-based polymers
 - 3.9.1 Polybutylene succinate (PBS)
 - 3.9.2 Polyamides (nylons)
 - 3.9.3 Polyethylene furanoate (PEF)
 - 3.9.4 Polytrimethylene terephthalate (PTT)
 - 3.9.5 Polyethylene isosorbide terephthalate (PEIT)
- 3.10 Bio-based composites and blends
 - 3.10.1 Wood-plastic composites (WPCs)
 - 3.10.2 Biofiller-reinforced plastics
 - 3.10.3 Biofiber-reinforced plastics
 - 3.10.4 Polymer blends with bio-based components
- 3.11 Beauty and Personal Care Chemicals
 - 3.11.1 Hyaluronic acid production
 - 3.11.2 Squalene and Squalane alternatives

- 3.11.3 Collagen
- 3.11.4 Bio-based UV filters and photoprotective compounds
- 3.11.5 Melanin
- 3.11.6 Emollients
- 3.12 Waste
 - 3.12.1 Food waste
 - 3.12.2 Agricultural waste
 - 3.12.3 Forestry waste
 - 3.12.4 Aquaculture/fishing waste
 - 3.12.5 Municipal solid waste
 - 3.12.6 Industrial waste
 - 3.12.7 Waste oils
- 3.13 Microbial and Mineral Sources
 - 3.13.1 Microalgae
 - 3.13.2 Macroalgae
 - 3.13.3 Cyanobacteria
 - 3.13.4 Mineral sources
- 3.14 Other Bio-manufactured Products
 - 3.14.1 Cement alternatives from biomanufacturing
 - 3.14.2 Precision fermentation products

4 MARKET ANALYSIS

- 4.1 Key players and competitive landscape
 - 4.1.1 Company landscape in specialty chemicals biotechnology
 - 4.1.2 Bio-manufactured beauty ingredient production capacities
- 4.2 Market Growth Drivers and Trends
 - 4.2.1 Trends and drivers in biotechnology
 - 4.2.2 Government support of biotechnology
 - 4.2.3 Carbon taxes
- 4.3 Regulations
- 4.4 Value chain
 - 4.4.1 Economic viability factors
 - 4.4.2 Effect of feedstock prices
 - 4.4.3 Scale-up effects on cost
- 4.5 Future outlook
- 4.6 Technology Readiness Level (TRL)
- 4.7 Addressable Market Size
- 4.8 Risks and Opportunities

4.9 Major market challenges

4.10 Technical challenges

4.11 Global revenues

4.11.1 By type

4.11.2 By application market

4.11.3 By regional market

5 COMPANY PROFILES (245 COMPANY PROFILES)

6 REFERENCES

List Of Tables

LIST OF TABLES

- Table 1. Types of biochemicals.
- Table 2. Types of Cell Culture Systems.
- Table 3. Factors Affecting Cell Culture Performance.
- Table 4. Types of Fermentation Processes.
- Table 5. Factors Affecting Fermentation Performance.
- Table 6. Advances in Fermentation Technology.
- Table 7. Continuous vs Batch Biomanufacturing Comparison.
- Table 8. Types of Purification Methods in Downstream Processing.
- Table 9. Factors Affecting Purification Performance.
- Table 10. Advances in Purification Technology.
- Table 11. Downstream Processing Technology Improvements.
- Table 12. TFF Applications in Downstream Processing.
- Table 13. Common formulation methods used in biomanufacturing.
- Table 14. Factors Affecting Formulation Performance.
- Table 15. Advances in Formulation Technology.
- Table 16. Factors Affecting Scale-up Performance in Biomanufacturing.
- Table 17. Scale-up Strategies in Biomanufacturing.
- Table 18. Factors Affecting Optimization Performance in Biomanufacturing.
- Table 19. Optimization Strategies in Biomanufacturing.
- Table 20. Machine Learning Applications in Biomanufacturing
- Table 21. High-Cell-Density Fermentation Parameters and Targets.
- Table 22. Hybrid Biotechnological-Chemical Process Applications.
- Table 23. Types of Quality Control Tests in Biomanufacturing.
- Table 24. Factors Affecting Quality Control Performance in Biomanufacturing
- Table 25. Types of Characterization Methods in Biomanufacturing.
- Table 26. Factors Affecting Characterization Performance in Biomanufacturing
- Table 27. DNA Synthesis Technologies and Capabilities.
- Table 28. CRISPR-Cas9 Applications in Biomanufacturing.
- Table 29. Protein Engineering Strategies and Applications.
- Table 30. Computer-Aided Design Tools in Biotechnology.
- Table 31. Strain Engineering Strategies and Targets.
- Table 32. Automation Applications in Biotechnology.
- Table 33. AI/ML Applications in Biomanufacturing Systems.
- Table 34. C1 Feedstock Utilization Pathways and Characteristics.
- Table 35. C2 Feedstock Processing and Applications.

- Table 36. Lignocellulosic Biomass Processing Technologies.
- Table 37. Blue Biotechnology Feedstock Characteristics and Applications.
- Table 38. Carbon Capture and Utilization Pathways in Biotechnology.
- Table 39. Key fermentation parameters in batch vs continuous biomanufacturing processes.
- Table 40. Key fermentation parameter comparison
- Table 41. Major microbial cell factories used in industrial biomanufacturing.
- Table 42. Organism Categories and Production Capabilities.
- Table 43. E. coli Characteristics for Biomanufacturing Applications.
- Table 44. C. glutamicum Production Capabilities and Characteristics.
- Table 45. B. subtilis Production Systems and Applications.
- Table 46. S. cerevisiae Capabilities and Industrial Applications.
- Table 47. Y. lipolytica Production Capabilities and Process Parameters.
- Table 48. Non-Model Organisms and Specialized Applications.
- Table 49. Perfusion Bioreactor Technologies and Performance.
- Table 50. Enzyme Immobilization Methods and Characteristics.
- Table 51. Immobilized Catalyst Systems and Applications.
- Table 52. Comparison of Modes of Operation.
- Table 53. Host organisms commonly used in biomanufacturing.
- Table 54. Plant-based feedstocks and biochemicals produced.
- Table 55. Waste-based feedstocks and biochemicals produced.
- Table 56. Microbial and mineral-based feedstocks and biochemicals produced.
- Table 57. Biobased feedstock sources for Succinic acid.
- Table 58. Applications of succinic acid.
- Table 59. Biobased feedstock sources for itaconic acid.
- Table 60. Applications of bio-based itaconic acid.
- Table 61. Feedstock Sources for Citric Acid Production.
- Table 62. Applications of Citric Acid.
- Table 63. Feedstock Sources for Acetic Acid Production.
- Table 64. Applications of Acetic Acid.
- Table 65. Feedstock Sources for Acetic Acid Production.
- Table 66. Applications of Acetic Acid.
- Table 67. Common lysine sources that can be used as feedstocks for producing biochemicals.
- Table 68. Applications of lysine as a feedstock for biochemicals.
- Table 69. Feedstock Sources for Threonine Production.
- Table 70. Applications of Threonine.
- Table 71. Feedstock Sources for Methionine Production.
- Table 72. Applications of Methionine.

- Table 73. Vitamins Produced Using Biotechnology.
- Table 74. Biobased feedstock sources for ethanol.
- Table 75. Applications of bio-based ethanol.
- Table 76. Feedstock Sources for Butanol Production.
- Table 77. Applications of Butanol.
- Table 78. Biobased feedstock sources for isobutanol.
- Table 79. Applications of bio-based isobutanol.
- Table 80. Applications of bio-based 1,3-Propanediol (1,3-PDO).
- Table 81. Types of Biosurfactants.
- Table 82. Feedstock Sources for Biosurfactant Production
- Table 83. Applications of Biosurfactants
- Table 84. Rhamnolipid Production and Application Characteristics.
- Table 85. Sophorolipid Types and Application Properties.
- Table 86. Mannosylerythritol Lipid Variants and Properties.
- Table 87. Cellobiose Lipid Development and Applications.
- Table 88. Designer Biosurfactant Engineering Strategies
- Table 89. Feedstock Sources for APG Production
- Table 90. Applications of Alkyl Polyglucosides (APGs)
- Table 91. Feedstock Sources for Ethyl Lactate Production.
- Table 92. Applications of Ethyl Lactate.
- Table 93. Feedstock Sources for Dimethyl Carbonate Production
- Table 94. Applications of Dimethyl Carbonate
- Table 95. Markets and applications for bio-based glycerol.
- Table 96. Bio-manufactured Fragrances and Aromatics.
- Table 97. Biotech-derived Fragrance Precursors.
- Table 98. Bio-manufactured Enhancers.
- Table 99. Feedstock Sources for Succinic Acid Production
- Table 100. Applications of Succinic Acid.
- Table 101. Applications of bio-based 1,4-Butanediol (BDO).
- Table 102. Feedstock Sources for Isoprene Production.
- Table 103. Applications of Isoprene.
- Table 104. Applications of bio-based ethylene.
- Table 105. Applications of bio-based propylene.
- Table 106. Applications of bio-based adipic acid.
- Table 107. Applications of bio-based acrylic acid.
- Table 108. Bio-PBS market analysis-manufacture, advantages, disadvantages and applications.
- Table 109. Leading PBS producers and production capacities.
- Table 110. Polyethylene furanoate (PEF) market analysis-manufacture, advantages,

disadvantages and applications.

Table 111. FDCA and PEF producers.

Table 112. Polytrimethylene terephthalate (PTT) market analysis-manufacture, advantages, disadvantages and applications.

Table 113. Production capacities of Polytrimethylene terephthalate (PTT), by leading producers.

Table 114. Types of Wood-Plastic Composites (WPCs).

Table 115. Types of Biofiber-Reinforced Plastics.

Table 116. Types of Polymer Blends with Bio-based Components.

Table 117. Hyaluronic Acid Production Parameters and Applications

Table 118. Squalene/Squalane Production Methods and Characteristics.

Table 119. Collagen Production Systems and Applications.

Table 120. Bio-based UV Filter Compounds and Characteristics.

Table 121. Melanin Production and Application Parameters.

Table 122. Bio-manufactured Emollient Categories and Properties.

Table 123. Mineral source products and applications.

Table 124. Cement Alternatives from Biomanufacturing.

Table 125. Precision Fermentation Products.

Table 126. Key players in Biochemicals.

Table 127. Bio-manufactured Beauty Ingredient Production Capacities

Table 128. Market Growth Drivers and Trends in Biochemicals.

Table 129. Trends and Drivers in Biotechnology.

Table 130. Government Support of Biotechnology.

Table 131. Biochemicals Regulations.

Table 132. Value chain: Biochemicals.

Table 133. Economic Viability Assessment Framework.

Table 134. Feedstock Price Impact Analysis for Biotechnology Production.

Table 135. Scale-up Cost Impact Analysis.

Table 136. Risks and Opportunities in Biochemicals.

Table 137. Market Challenge Assessment and Mitigation Strategies.

Table 138. Technical Challenge Assessment and Solutions.

Table 139. Global revenues for biochemicals, by type (2020-2036), billions USD.

Table 140. Global revenues for biochemicals, by applications market (2020-2036), billions USD.

Table 141. Global revenues for biochemicals, by regional market (2020-2036), billions USD.

List Of Figures

LIST OF FIGURES

- Figure 1. Schematic of biorefinery processes.
- Figure 2. Production capacities of Polyethylene furanoate (PEF) to 2025.
- Figure 3. Technology Readiness Level (TRL): Biochemicals.
- Figure 4. Jelly-like seaweed-based nanocellulose hydrogel.
- Figure 5. Algiknit yarn.
- Figure 6. BIOLO e-commerce mailer bag made from PHA.
- Figure 7. formicobio™ technology.
- Figure 8. Domsj? process.
- Figure 9. Mushroom leather.
- Figure 10. TMP-Bio Process.
- Figure 11. Lignin gel.
- Figure 12. BioFlex process.
- Figure 13. LX Process.
- Figure 14. TransLeather.
- Figure 15. METNIN™ Lignin refining technology.
- Figure 16. Enfinity cellulosic ethanol technology process.
- Figure 17. Precision Photosynthesis™ technology.
- Figure 18. Fabric consisting of 70 per cent wool and 30 per cent Qmilk.
- Figure 19. Corbion FDCA production process.
- Figure 20. UPM biorefinery process.
- Figure 21. The Proesa® Process.
- Figure 22. Goldilocks process and applications.

I would like to order

Product name: The Global Biochemicals Market 2026-2036

Product link: <https://marketpublishers.com/r/GBB5EB400507EN.html>

Price: US\$ 1,400.00 (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/GBB5EB400507EN.html>