

3-Hydroxypropionic Acid Market Size, Share & Trends Analysis Report By Source (Chemical, Bio-based), By Form (Powder, Liquid), Application (Acrylic Acid Production, 1,3 Propanediol), By Region (North America, Europe), And Segment Forecasts, 2024 - 2030

<https://marketpublishers.com/r/384FE3A7E3A3EN.html>

Date: July 2024

Pages: 118

Price: US\$ 5,950.00 (Single User License)

ID: 384FE3A7E3A3EN

Abstracts

This report can be delivered to the clients within 6 Business Days

3-Hydroxypropionic Acid Market Growth & Trends

The global 3-hydroxypropionic acid market size is anticipated to reach USD 1.34 billion by 2030, growing at a CAGR of 9.5% from 2024 to 2030, according to a new report by Grand View Research, Inc. The growth is majorly attributed to increasing application of 3-HPA in the production of acrylic acid which is further used in the manufacturing process of a wide range of products such as plastics, fibers, paints, and super-absorbent diapers. It is also used in the production of coatings, widely used in the global automotive industry.

The Environmental, Social, and Governance (ESG) aspects of 3-hydroxypropionic acid (3-HP) focus on its potential as a green and sustainable platform chemical. This compound plays a crucial role as part of carbon-neutralization and green chemistry initiatives, in accordance with ESG values, by offering eco-friendly production using microbial pathways.

Furthermore, the biological production of 3-HP from various sources, such as sugars and glycerol, highlights its versatility and eco-friendly nature, further enhancing its ESG

profile. 3-hydroxypropionic acid is a valuable platform chemical that aligns with ESG attributes and good practices in the chemical industry, promoting environmental sustainability and social responsibility.

The production of 3-hydroxypropionic acid is influenced by several factors including the production method, market demand, and supply chain. The chemical synthesis method, which is complex and expensive, contributes to the high cost of 3-hydroxypropionic acid. Bio-based production methods utilizing renewable resources like glycerol or 1,3-propanediol are more cost effective and sustainable.

The production of 3-Hydroxypropionic acid is a complex and expensive process that requires significant energy and resources. The cost of raw materials, such as glycerol, is also increasing globally. Moreover, the cost of producing 3-Hydroxypropionic acid using Coenzyme B12 via the glycerol pathway in *E. coli* is high because Coenzyme B12 is expensive. In order to produce 3-Hydroxypropionic acid through the glycerol pathway in *E. coli*, manufacturers must introduce a foreign glycerol dehydratase (GDHt) and add Coenzyme B12 externally. This increases the production cost, which affects the overall economics of the production process.

A significant challenge for industrial-scale production of 3-HP from sugar is the inferior performance of fermentation microbes, which leads to diluted product streams and high separation costs. Few bio-based methods involving lactic acid, yeast, yeast-based ethanol, bacteria-based lactic acid, and coli-based propanediol can compete with petrol-based processes, resulting in higher production costs.

3-Hydroxypropionic Acid Market Report Highlights

Petrochemical based products dominated the market with a revenue share of 82.3% in 2023 owing to reduce the cost of production of 3-HPA using petrochemical source and its easy availability in the market.

Liquid form of the product dominated the market with a revenue share of 65.5% in 2023. The liquid form of 3-HPA is a colorless, odorless, and transparent organic acid. It is soluble in water, ethanol, and ether. It is also used in the food & beverage industry as an acidulant and flavor enhancer.

Acrylic acid production application dominated the market with a revenue share of 82.5% in 2023. 3-Hydroxypropionic acid (3HPA) is a key intermediate in the

production of acrylic acid. The synthesis of acrylic acid is achieved through the process known as microbial fermentation

Asia Pacific dominated the market segment with a revenue share of 39.7% in 2023 owing to the rising construction activities and increasing demand from the automotive sector in emerging countries, such as India, South Korea, Japan, Indonesia, and the Philippines, which are expected to drive the market over the forecast period.

Contents

CHAPTER 1. METHODOLOGY AND SCOPE

- 1.1. Market Segmentation & Scope
- 1.2. Market Definition
- 1.3. Information Procurement
 - 1.3.1. Purchased Database
 - 1.3.2. GVR's Internal Database
 - 1.3.3. Secondary Sources & Third-Party Perspectives
 - 1.3.4. Primary Research
- 1.4. Information Analysis
 - 1.4.1. Data Analysis Models
- 1.5. Market Formulation & Data Visualization
- 1.6. Data Validation & Publishing

CHAPTER 2. EXECUTIVE SUMMARY

- 2.1. Market Snapshot
- 2.2. Segment Snapshot
- 2.3. Competitive Landscape Snapshot

CHAPTER 3. 3-HYDROXYPROPIONIC ACID MARKET VARIABLES, TRENDS & SCOPE

- 3.1. Market Lineage Outlook
 - 3.1.1. Global Carboxylic Acid Market
- 3.2. Industry Value Chain Analysis
 - 3.2.1. Sales Channel Analysis
 - 3.2.2. List of Potential End Users
- 3.3. Price Trend Analysis
 - 3.3.1. Factors Influencing Prices
- 3.4. Production Technologies
- 3.5. Patent Analysis
- 3.6. Regulatory Framework, By Regions
- 3.7. Market Dynamics
 - 3.7.1. Market Driver Analysis
 - 3.7.2. Market Restraint Analysis
 - 3.7.3. Industry Challenges

- 3.7.4. Industry Opportunities
- 3.8. Industry Analysis Tools
 - 3.8.1. Porter's Five Forces Analysis
 - 3.8.2. Macro-environmental Analysis

CHAPTER 4. 3-HYDROXYPROPIONIC ACID MARKET: SOURCE ESTIMATES & TREND ANALYSIS

- 4.1. Source Movement Analysis & Market Share, 2023 & 2030
- 4.2. Petrochemical
 - 4.2.1. Petrochemical based 3-Hydroxypropionic Acid Market Estimates & Forecast, 2018 to 2030 (USD Million) (Kilotons)
- 4.3. Bio-Based
 - 4.3.1. Bio-Based 3-Hydroxypropionic Acid Estimates and Forecasts, 2018 - 2030 (USD Million) (Kilotons)

CHAPTER 5. 3-HYDROXYPROPIONIC ACID MARKET: FORM ESTIMATES & TREND ANALYSIS

- 5.1. Form Movement Analysis & Market Share, 2023 & 2030
- 5.2. Liquid
 - 5.2.1. Liquid 3-Hydroxypropionic Acid Market Estimates & Forecast, 2018 to 2030 (USD Million) (Kilotons)
- 5.3. Powder
 - 5.3.1. Powder 3-Hydroxypropionic Acid Estimates and Forecasts, 2018 - 2030 (USD Million) (Kilotons)

CHAPTER 6. 3-HYDROXYPROPIONIC ACID MARKET: APPLICATION ESTIMATES & TREND ANALYSIS

- 6.1. Application Movement Analysis & Market Share, 2023 & 2030
- 6.2. Acrylic Acid Production
 - 6.2.1. 3-Hydroxypropionic Acid Market Estimates & Forecast, in Acrylic Acid Production, 2018 to 2030 (USD Million) (Kilotons)
- 6.3. 1,3 Propanediol
 - 6.3.1. 3-Hydroxypropionic Acid Market Estimates & Forecast, in 1,3 Propanediol, 2018 to 2030 (USD Million) (Kilotons)
- 6.4. Other Applications
 - 6.4.1. 3-Hydroxypropionic Acid Market Estimates & Forecast, in Other Applications,

2018 to 2030 (USD Million) (Kilotons)

CHAPTER 7. 3-HYDROXYPROPIONIC ACID MARKET: REGIONAL ESTIMATES & TREND ANALYSIS

7.1. Regional Movement Analysis & Market Share, 2023 & 2030

7.2. North America

7.2.1. North America 3-Hydroxypropionic Acid Market Estimates & Forecast, 2018 - 2030 (USD Million) (Kilotons)

7.2.2. U.S.

7.2.2.1. Key country dynamics

7.2.2.2. U.S. 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030 (USD Million) (Kilotons)

7.2.3. Canada

7.2.3.1. Key country dynamics

7.2.3.2. Canada 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030 (USD Million) (Kilotons)

7.2.4. Mexico

7.2.4.1. Key country dynamics

7.2.4.2. Mexico 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030 (USD Million) (Kilotons)

7.3. Europe

7.3.1. Europe Organic Fertilizer Estimates & Forecast, 2018 - 2030 (USD Million) (Kilotons)

7.3.2. Germany

7.3.2.1. Key country dynamics

7.3.2.2. Germany 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030 (USD Million) (Kilotons)

7.3.3. UK

7.3.3.1. Key country dynamics

7.3.3.2. UK 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030 (USD Million) (Kilotons)

7.3.4. France

7.3.4.1. Key country dynamics

7.3.4.2. France 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030 (USD Million) (Kilotons)

7.3.5. Italy

7.3.5.1. Key country dynamics

7.3.5.2. Italy 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030 (USD

Million) (Kilotons)

7.4. Asia Pacific

7.4.1. Asia Pacific 3-Hydroxypropionic Acid Market Estimates & Forecast, 2018 - 2030
(USD Million) (Kilotons)

7.4.2. China

7.4.2.1. Key country dynamics

7.4.2.2. China 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030
(USD Million) (Kilotons)

7.4.3. India

7.4.3.1. Key country dynamics

7.4.3.2. India 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030
(USD Million) (Kilotons)

7.4.4. Japan

7.4.4.1. Key country dynamics

7.4.4.2. Japan 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030
(USD Million) (Kilotons)

7.5. Central & South America

7.5.1. Central & South America 3-Hydroxypropionic Acid Market Estimates & Forecast,
2018 - 2030 (USD Million) (Kilotons)

7.5.2. Brazil

7.5.2.1. Key country dynamics

7.5.2.2. Brazil 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030
(USD Million) (Kilotons)

7.5.3. Argentina

7.5.3.1. Key country dynamics

7.5.3.2. Argentina 3-Hydroxypropionic Acid Market estimates & forecast, 2018 - 2030
(USD Million) (Kilotons)

7.6. Middle East & Africa

7.6.1. Middle East & Africa 3-Hydroxypropionic Acid Market Estimates & Forecast,
2018 - 2030 (USD Million) (Kilotons)

7.6.2. Saudi Arabia

7.6.2.1. Key country dynamics

7.6.2.2. Saudi Arabia 3-Hydroxypropionic Acid Market estimates & forecast, 2018 -
2030 (USD Million) (Kilotons)

7.6.3. South Africa

7.6.3.1. Key country dynamics

7.6.3.2. South Africa 3-Hydroxypropionic Acid Market estimates & forecast, 2018 -
2030 (USD Million) (Kilotons)

CHAPTER 8. 3-HYDROXYPROPIONIC ACID MARKET - COMPETITIVE LANDSCAPE

8.1. Recent Developments & Impact Analysis, By Key Market Participants

8.2. Key Company Categorization

8.3. Company Market Positioning Analysis, 2023

8.4. Company Heat Map Analysis

8.5. Strategy Mapping

8.6. Company Profiles

8.6.1. Zhengzhou Alfa Chemical Co., Ltd.

8.6.1.1. Participant's overview

8.6.1.2. Financial performance

8.6.1.3. Product benchmarking

8.6.1.4. Recent developments

8.6.2. Fluoropharm Co., Ltd.

8.6.2.1. Participant's overview

8.6.2.2. Financial performance

8.6.2.3. Product benchmarking

8.6.2.4. Recent developments

8.6.3. LG Chem

8.6.3.1. Participant's overview

8.6.3.2. Financial performance

8.6.3.3. Product benchmarking

8.6.3.4. Recent developments

8.6.4. Thermo Fisher Scientific Inc.

8.6.4.1. Participant's overview

8.6.4.2. Financial performance

8.6.4.3. Product benchmarking

8.6.4.4. Recent developments

8.6.5. Beijing PhaBuilder Biotechnology Co., Ltd.

8.6.5.1. Participant's overview

8.6.5.2. Financial performance

8.6.5.3. Product benchmarking

8.6.5.4. Recent developments

8.6.6. Cargill, Incorporated

8.6.6.1. Participant's overview

8.6.6.2. Financial performance

8.6.6.3. Product benchmarking

8.6.6.4. Recent developments

8.6.7. Tokyo Chemical Industry Co., Ltd. (TCI)

8.6.7.1. Participant's overview

8.6.7.2. Financial performance

8.6.7.3. Product benchmarking

8.6.7.4. Recent developments

List Of Tables

LIST OF TABLES

Table 1	List of Potential End-Users
Table 2	Regulatory Framework, by Regions
Table 3	List of Raw Material Suppliers
Table 4	U.S. Macroeconomic Outlay
Table 5	Canada Macroeconomic Outlay
Table 6	Mexico Macroeconomic Outlay
Table 7	Germany Macroeconomic Outlay
Table 8	UK Macroeconomic Outlay
Table 9	France Macroeconomic Outlay
Table 10	Italy Macroeconomic Outlay
Table 11	China Macroeconomic Outlay
Table 12	India Macroeconomic Outlay
Table 13	Japan Macroeconomic Outlay
Table 14	Brazil Macroeconomic Outlay
Table 15	Argentina Macroeconomic Outlay
Table 16	Saudi Arabia Macroeconomic Outlay
Table 17	South Africa Macroeconomic Outlay
Table 18	Participant's Overview
Table 19	Financial Performance
Table 20	Product Benchmarking
Table 21	Company Heat Map Analysis
Table 22	Key Strategy Mapping

List Of Figures

LIST OF FIGURES

- Fig. 1 Asset Management Market Segmentation
- Fig. 2 Market landscape
- Fig. 3 Information Procurement
- Fig. 4 Data Analysis Asset Types
- Fig. 5 Market Formulation and Validation
- Fig. 6 Data Validating & Publishing
- Fig. 7 Market Snapshot
- Fig. 8 Segment Snapshot (1/3)
- Fig. 9 Segment Snapshot (2/3)
- Fig. 10 Segment Snapshot (3/3)
- Fig. 11 Competitive Landscape Snapshot
- Fig. 12 Asset Management: Industry Value Chain Analysis
- Fig. 13 Asset Management: Market Dynamics
- Fig. 14 Asset Management: PORTER's Analysis
- Fig. 15 Asset Management: PESTEL Analysis
- Fig. 16 Asset Management Share by Component, 2023 & 2030 (USD Billion)
- Fig. 17 Asset Management, by Component: Market Share, 2023 & 2030
- Fig. 18 Solution Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 19 Real-Time Location System (RTLS) Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 20 Barcode Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 21 Mobile Computer Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 22 Labels Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 23 Global Positioning System (GPS) Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 24 Others Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 25 Service Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 26 Strategic Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 27 Operational Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 28 Tactical Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 29 Asset Management Share by Asset Type, 2023 & 2030 (USD Billion)

- Fig. 30 Asset Management Market, by Asset Type: Market Share, 2023 & 2030
- Fig. 31 Digital Assets Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 32 Returnable Transport Assets Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 33 In-transit Assets Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 34 In-transit Assets Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 35 In-transit Assets Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 36 Asset Management Share by Function, 2023 & 2030 (USD Billion)
- Fig. 37 Asset Management, by Function: Market Share, 2023 & 2030
- Fig. 38 Location & Movement Tracking Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 39 Check In/Check Out Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 40 Repair & Maintenance Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 41 Others Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 42 Asset Management Share by Application, 2023 & 2030 (USD Billion)
- Fig. 43 Asset Management, by Application: Market Share, 2023 & 2030
- Fig. 44 Infrastructure Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 45 Transportation Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 46 Energy Infrastructure Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 47 Water & Waste Infrastructure Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 48 Critical Infrastructure Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 49 Others Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 50 Enterprise Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 51 Healthcare Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 52 Aviation Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 53 Others Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 54 Regional Market place: Key Takeaways
- Fig. 55 North America Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)
- Fig. 56 U.S. Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 57 Canada Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 58 Mexico Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 59 Europe Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 60 U.K. Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 61 Germany Asset Management Market Estimates and Forecasts 2018 - 2030 (USD Billion)

Fig. 62 France Asset Management Market Estimates and Forecasts 2018 - 2030 (USD Billion)

Fig. 63 Asia Pacific Asset Management Market Estimates and Forecast, 2018 - 2030 (USD Billion)

Fig. 64 China Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 65 India Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 66 Japan Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 67 Australia Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 68 South Korea Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 69 Latin America Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 70 Brazil Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 71 MEA Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 72 Saudi Arabia Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 73 UAE Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 74 South Africa Asset Management Market Estimates and Forecasts, 2018 - 2030 (USD Billion)

Fig. 75 Key Company Categorization

Fig. 76 Company Market Positioning

Fig. 77 Key Company Market Share Analysis, 2023

Fig. 78 Strategic Framework

I would like to order

Product name: 3-Hydroxypropionic Acid Market Size, Share & Trends Analysis Report By Source (Chemical, Bio-based), By Form (Powder, Liquid), Application (Acrylic Acid Production, 1,3 Propanediol), By Region (North America, Europe), And Segment Forecasts, 2024 - 2030

Product link: <https://marketpublishers.com/r/384FE3A7E3A3EN.html>

Price: US\$ 5,950.00 (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/384FE3A7E3A3EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970