

Global Biological 1,3-Propanediol (PDO) Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029

https://marketpublishers.com/r/G8C6E4BC1068EN.html

Date: July 2024

Pages: 97

Price: US\$ 3,480.00 (Single User License)

ID: G8C6E4BC1068EN

Abstracts

According to our (Global Info Research) latest study, the global Biological 1,3-Propanediol (PDO) market size was valued at USD 547.4 million in 2022 and is forecast to a readjusted size of USD 952.2 million by 2029 with a CAGR of 8.2% during review period. The influence of COVID-19 and the Russia-Ukraine War were considered while estimating market sizes.

Biological 1,3-Propanediol, also known as bio-based 1,3-propanediol or bio-PDO, is a renewable and sustainable chemical compound derived from biomass sources. It is a type of diol, meaning it contains two hydroxyl groups (-OH) attached to adjacent carbon atoms. Bio-PDO is produced through the fermentation process of renewable feedstocks such as corn, sugar beets, or sugarcane. The feedstock is converted into glycerol, which is then further processed to produce bio-PDO. This bio-based alternative to traditional petroleum-based 1,3-propanediol offers several advantages, including reduced environmental impact and lower carbon emissions.

This report is a detailed and comprehensive analysis for global Biological 1,3-Propanediol (PDO) market. Both quantitative and qualitative analyses are presented by manufacturers, by region & country, by Type and by Application. As the market is constantly changing, this report explores the competition, supply and demand trends, as well as key factors that contribute to its changing demands across many markets. Company profiles and product examples of selected competitors, along with market share estimates of some of the selected leaders for the year 2023, are provided.

Key Features:



Global Biological 1,3-Propanediol (PDO) market size and forecasts, in consumption value (\$ Million), sales quantity (Tons), and average selling prices (US\$/Ton), 2018-2029

Global Biological 1,3-Propanediol (PDO) market size and forecasts by region and country, in consumption value (\$ Million), sales quantity (Tons), and average selling prices (US\$/Ton), 2018-2029

Global Biological 1,3-Propanediol (PDO) market size and forecasts, by Type and by Application, in consumption value (\$ Million), sales quantity (Tons), and average selling prices (US\$/Ton), 2018-2029

Global Biological 1,3-Propanediol (PDO) market shares of main players, shipments in revenue (\$ Million), sales quantity (Tons), and ASP (US\$/Ton), 2018-2023

The Primary Objectives in This Report Are:

To determine the size of the total market opportunity of global and key countries

To assess the growth potential for Biological 1,3-Propanediol (PDO)

To forecast future growth in each product and end-use market

To assess competitive factors affecting the marketplace

This report profiles key players in the global Biological 1,3-Propanediol (PDO) market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include DuPont, METabolic EXplorer, Zhangjiagang Glory Chemical Industry, Jiangsu Eastern Shenghong and Guangdong Tsinghua Smart Biotech. etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals, COVID-19 and Russia-Ukraine War Influence.

Market Segmentation

Biological 1,3-Propanediol (PDO) market is split by Type and by Application. For the period 2018-2029, the growth among segments provides accurate calculations and



forecasts for consumption value by Type, and by Application in terms of volume and value. This analysis can help you expand your business by targeting qualified niche markets.

Market segment by Type	
In	ndustrial Grade
P	harmaceutical Grade
Market segment by Application	
P.	TT & Polyurethane
С	Cosmetic
P	harmaceutical
0	Other
Major players covered	
D	PuPont
М	1ETabolic EXplorer
ZI	hangjiagang Glory Chemical Industry
Ji	iangsu Eastern Shenghong
G	Guangdong Tsinghua Smart Biotech

North America (United States, Canada and Mexico)

Market segment by region, regional analysis covers



Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Biological 1,3-Propanediol (PDO) product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Biological 1,3-Propanediol (PDO), with price, sales, revenue and global market share of Biological 1,3-Propanediol (PDO) from 2018 to 2023.

Chapter 3, the Biological 1,3-Propanediol (PDO) competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Biological 1,3-Propanediol (PDO) breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2018 to 2029.

Chapter 5 and 6, to segment the sales by Type and application, with sales market share and growth rate by type, application, from 2018 to 2029.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value and market share for key countries in the world, from 2017 to 2022.and Biological 1,3-Propanediol (PDO) market forecast, by regions, type and application, with sales and revenue, from 2024 to 2029.

Chapter 12, market dynamics, drivers, restraints, trends, Porters Five Forces analysis, and Influence of COVID-19 and Russia-Ukraine War.

Chapter 13, the key raw materials and key suppliers, and industry chain of Biological



1,3-Propanediol (PDO).

Chapter 14 and 15, to describe Biological 1,3-Propanediol (PDO) sales channel, distributors, customers, research findings and conclusion.



Contents

1 MARKET OVERVIEW

- 1.1 Product Overview and Scope of Biological 1,3-Propanediol (PDO)
- 1.2 Market Estimation Caveats and Base Year
- 1.3 Market Analysis by Type
- 1.3.1 Overview: Global Biological 1,3-Propanediol (PDO) Consumption Value by Type:
- 2018 Versus 2022 Versus 2029
 - 1.3.2 Industrial Grade
 - 1.3.3 Pharmaceutical Grade
- 1.4 Market Analysis by Application
 - 1.4.1 Overview: Global Biological 1,3-Propanediol (PDO) Consumption Value by

Application: 2018 Versus 2022 Versus 2029

- 1.4.2 PTT & Polyurethane
- 1.4.3 Cosmetic
- 1.4.4 Pharmaceutical
- 1.4.5 Other
- 1.5 Global Biological 1,3-Propanediol (PDO) Market Size & Forecast
- 1.5.1 Global Biological 1,3-Propanediol (PDO) Consumption Value (2018 & 2022 & 2029)
 - 1.5.2 Global Biological 1,3-Propanediol (PDO) Sales Quantity (2018-2029)
 - 1.5.3 Global Biological 1,3-Propanediol (PDO) Average Price (2018-2029)

2 MANUFACTURERS PROFILES

- 2.1 DuPont
 - 2.1.1 DuPont Details
 - 2.1.2 DuPont Major Business
 - 2.1.3 DuPont Biological 1,3-Propanediol (PDO) Product and Services
 - 2.1.4 DuPont Biological 1,3-Propanediol (PDO) Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

- 2.1.5 DuPont Recent Developments/Updates
- 2.2 METabolic EXplorer
 - 2.2.1 METabolic EXplorer Details
 - 2.2.2 METabolic EXplorer Major Business
 - 2.2.3 METabolic EXplorer Biological 1,3-Propanediol (PDO) Product and Services
 - 2.2.4 METabolic EXplorer Biological 1,3-Propanediol (PDO) Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)



- 2.2.5 METabolic EXplorer Recent Developments/Updates
- 2.3 Zhangjiagang Glory Chemical Industry
 - 2.3.1 Zhangjiagang Glory Chemical Industry Details
 - 2.3.2 Zhangjiagang Glory Chemical Industry Major Business
- 2.3.3 Zhangjiagang Glory Chemical Industry Biological 1,3-Propanediol (PDO) Product and Services
- 2.3.4 Zhangjiagang Glory Chemical Industry Biological 1,3-Propanediol (PDO) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
- 2.3.5 Zhangjiagang Glory Chemical Industry Recent Developments/Updates
- 2.4 Jiangsu Eastern Shenghong
 - 2.4.1 Jiangsu Eastern Shenghong Details
 - 2.4.2 Jiangsu Eastern Shenghong Major Business
- 2.4.3 Jiangsu Eastern Shenghong Biological 1,3-Propanediol (PDO) Product and Services
- 2.4.4 Jiangsu Eastern Shenghong Biological 1,3-Propanediol (PDO) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
 - 2.4.5 Jiangsu Eastern Shenghong Recent Developments/Updates
- 2.5 Guangdong Tsinghua Smart Biotech
 - 2.5.1 Guangdong Tsinghua Smart Biotech Details
 - 2.5.2 Guangdong Tsinghua Smart Biotech Major Business
- 2.5.3 Guangdong Tsinghua Smart Biotech Biological 1,3-Propanediol (PDO) Product and Services
- 2.5.4 Guangdong Tsinghua Smart Biotech Biological 1,3-Propanediol (PDO) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
 - 2.5.5 Guangdong Tsinghua Smart Biotech Recent Developments/Updates

3 COMPETITIVE ENVIRONMENT: BIOLOGICAL 1,3-PROPANEDIOL (PDO) BY MANUFACTURER

- 3.1 Global Biological 1,3-Propanediol (PDO) Sales Quantity by Manufacturer (2018-2023)
- 3.2 Global Biological 1,3-Propanediol (PDO) Revenue by Manufacturer (2018-2023)
- 3.3 Global Biological 1,3-Propanediol (PDO) Average Price by Manufacturer (2018-2023)
- 3.4 Market Share Analysis (2022)
- 3.4.1 Producer Shipments of Biological 1,3-Propanediol (PDO) by Manufacturer Revenue (\$MM) and Market Share (%): 2022
- 3.4.2 Top 3 Biological 1,3-Propanediol (PDO) Manufacturer Market Share in 2022
- 3.4.2 Top 6 Biological 1,3-Propanediol (PDO) Manufacturer Market Share in 2022



- 3.5 Biological 1,3-Propanediol (PDO) Market: Overall Company Footprint Analysis
 - 3.5.1 Biological 1,3-Propanediol (PDO) Market: Region Footprint
 - 3.5.2 Biological 1,3-Propanediol (PDO) Market: Company Product Type Footprint
- 3.5.3 Biological 1,3-Propanediol (PDO) Market: Company Product Application Footprint
- 3.6 New Market Entrants and Barriers to Market Entry
- 3.7 Mergers, Acquisition, Agreements, and Collaborations

4 CONSUMPTION ANALYSIS BY REGION

- 4.1 Global Biological 1,3-Propanediol (PDO) Market Size by Region
 - 4.1.1 Global Biological 1,3-Propanediol (PDO) Sales Quantity by Region (2018-2029)
- 4.1.2 Global Biological 1,3-Propanediol (PDO) Consumption Value by Region (2018-2029)
- 4.1.3 Global Biological 1,3-Propanediol (PDO) Average Price by Region (2018-2029)
- 4.2 North America Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029)
- 4.3 Europe Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029)
- 4.4 Asia-Pacific Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029)
- 4.5 South America Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029)
- 4.6 Middle East and Africa Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029)

5 MARKET SEGMENT BY TYPE

- 5.1 Global Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2029)
- 5.2 Global Biological 1,3-Propanediol (PDO) Consumption Value by Type (2018-2029)
- 5.3 Global Biological 1,3-Propanediol (PDO) Average Price by Type (2018-2029)

6 MARKET SEGMENT BY APPLICATION

- 6.1 Global Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2029)
- 6.2 Global Biological 1,3-Propanediol (PDO) Consumption Value by Application (2018-2029)
- 6.3 Global Biological 1,3-Propanediol (PDO) Average Price by Application (2018-2029)

7 NORTH AMERICA

7.1 North America Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2029)



- 7.2 North America Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2029)
- 7.3 North America Biological 1,3-Propanediol (PDO) Market Size by Country
- 7.3.1 North America Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2018-2029)
- 7.3.2 North America Biological 1,3-Propanediol (PDO) Consumption Value by Country (2018-2029)
 - 7.3.3 United States Market Size and Forecast (2018-2029)
 - 7.3.4 Canada Market Size and Forecast (2018-2029)
 - 7.3.5 Mexico Market Size and Forecast (2018-2029)

8 EUROPE

- 8.1 Europe Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2029)
- 8.2 Europe Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2029)
- 8.3 Europe Biological 1,3-Propanediol (PDO) Market Size by Country
- 8.3.1 Europe Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2018-2029)
- 8.3.2 Europe Biological 1,3-Propanediol (PDO) Consumption Value by Country (2018-2029)
 - 8.3.3 Germany Market Size and Forecast (2018-2029)
 - 8.3.4 France Market Size and Forecast (2018-2029)
- 8.3.5 United Kingdom Market Size and Forecast (2018-2029)
- 8.3.6 Russia Market Size and Forecast (2018-2029)
- 8.3.7 Italy Market Size and Forecast (2018-2029)

9 ASIA-PACIFIC

- 9.1 Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2029)
- 9.2 Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2029)
- 9.3 Asia-Pacific Biological 1,3-Propanediol (PDO) Market Size by Region
- 9.3.1 Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity by Region (2018-2029)
- 9.3.2 Asia-Pacific Biological 1,3-Propanediol (PDO) Consumption Value by Region (2018-2029)
 - 9.3.3 China Market Size and Forecast (2018-2029)
 - 9.3.4 Japan Market Size and Forecast (2018-2029)
 - 9.3.5 Korea Market Size and Forecast (2018-2029)
- 9.3.6 India Market Size and Forecast (2018-2029)



- 9.3.7 Southeast Asia Market Size and Forecast (2018-2029)
- 9.3.8 Australia Market Size and Forecast (2018-2029)

10 SOUTH AMERICA

- 10.1 South America Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2029)
- 10.2 South America Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2029)
- 10.3 South America Biological 1,3-Propanediol (PDO) Market Size by Country
- 10.3.1 South America Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2018-2029)
- 10.3.2 South America Biological 1,3-Propanediol (PDO) Consumption Value by Country (2018-2029)
 - 10.3.3 Brazil Market Size and Forecast (2018-2029)
 - 10.3.4 Argentina Market Size and Forecast (2018-2029)

11 MIDDLE EAST & AFRICA

- 11.1 Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2029)
- 11.2 Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2029)
- 11.3 Middle East & Africa Biological 1,3-Propanediol (PDO) Market Size by Country 11.3.1 Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2018-2029)
- 11.3.2 Middle East & Africa Biological 1,3-Propanediol (PDO) Consumption Value by Country (2018-2029)
 - 11.3.3 Turkey Market Size and Forecast (2018-2029)
 - 11.3.4 Egypt Market Size and Forecast (2018-2029)
 - 11.3.5 Saudi Arabia Market Size and Forecast (2018-2029)
 - 11.3.6 South Africa Market Size and Forecast (2018-2029)

12 MARKET DYNAMICS

- 12.1 Biological 1,3-Propanediol (PDO) Market Drivers
- 12.2 Biological 1,3-Propanediol (PDO) Market Restraints
- 12.3 Biological 1,3-Propanediol (PDO) Trends Analysis
- 12.4 Porters Five Forces Analysis



- 12.4.1 Threat of New Entrants
- 12.4.2 Bargaining Power of Suppliers
- 12.4.3 Bargaining Power of Buyers
- 12.4.4 Threat of Substitutes
- 12.4.5 Competitive Rivalry
- 12.5 Influence of COVID-19 and Russia-Ukraine War
 - 12.5.1 Influence of COVID-19
 - 12.5.2 Influence of Russia-Ukraine War

13 RAW MATERIAL AND INDUSTRY CHAIN

- 13.1 Raw Material of Biological 1,3-Propanediol (PDO) and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of Biological 1,3-Propanediol (PDO)
- 13.3 Biological 1,3-Propanediol (PDO) Production Process
- 13.4 Biological 1,3-Propanediol (PDO) Industrial Chain

14 SHIPMENTS BY DISTRIBUTION CHANNEL

- 14.1 Sales Channel
 - 14.1.1 Direct to End-User
 - 14.1.2 Distributors
- 14.2 Biological 1,3-Propanediol (PDO) Typical Distributors
- 14.3 Biological 1,3-Propanediol (PDO) Typical Customers

15 RESEARCH FINDINGS AND CONCLUSION

16 APPENDIX

- 16.1 Methodology
- 16.2 Research Process and Data Source
- 16.3 Disclaimer



List Of Tables

LIST OF TABLES

- Table 1. Global Biological 1,3-Propanediol (PDO) Consumption Value by Type, (USD Million), 2018 & 2022 & 2029
- Table 2. Global Biological 1,3-Propanediol (PDO) Consumption Value by Application, (USD Million), 2018 & 2022 & 2029
- Table 3. DuPont Basic Information, Manufacturing Base and Competitors
- Table 4. DuPont Major Business
- Table 5. DuPont Biological 1,3-Propanediol (PDO) Product and Services
- Table 6. DuPont Biological 1,3-Propanediol (PDO) Sales Quantity (Tons), Average
- Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 7. DuPont Recent Developments/Updates
- Table 8. METabolic EXplorer Basic Information, Manufacturing Base and Competitors
- Table 9. METabolic EXplorer Major Business
- Table 10. METabolic EXplorer Biological 1,3-Propanediol (PDO) Product and Services
- Table 11. METabolic EXplorer Biological 1,3-Propanediol (PDO) Sales Quantity (Tons),
- Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 12. METabolic EXplorer Recent Developments/Updates
- Table 13. Zhangjiagang Glory Chemical Industry Basic Information, Manufacturing Base and Competitors
- Table 14. Zhangjiagang Glory Chemical Industry Major Business
- Table 15. Zhangjiagang Glory Chemical Industry Biological 1,3-Propanediol (PDO) Product and Services
- Table 16. Zhangjiagang Glory Chemical Industry Biological 1,3-Propanediol (PDO) Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin

and Market Share (2018-2023)

- Table 17. Zhangjiagang Glory Chemical Industry Recent Developments/Updates
- Table 18. Jiangsu Eastern Shenghong Basic Information, Manufacturing Base and Competitors
- Table 19. Jiangsu Eastern Shenghong Major Business
- Table 20. Jiangsu Eastern Shenghong Biological 1,3-Propanediol (PDO) Product and Services
- Table 21. Jiangsu Eastern Shenghong Biological 1,3-Propanediol (PDO) Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 22. Jiangsu Eastern Shenghong Recent Developments/Updates



- Table 23. Guangdong Tsinghua Smart Biotech Basic Information, Manufacturing Base and Competitors
- Table 24. Guangdong Tsinghua Smart Biotech Major Business
- Table 25. Guangdong Tsinghua Smart Biotech Biological 1,3-Propanediol (PDO) Product and Services
- Table 26. Guangdong Tsinghua Smart Biotech Biological 1,3-Propanediol (PDO) Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 27. Guangdong Tsinghua Smart Biotech Recent Developments/Updates
- Table 28. Global Biological 1,3-Propanediol (PDO) Sales Quantity by Manufacturer (2018-2023) & (Tons)
- Table 29. Global Biological 1,3-Propanediol (PDO) Revenue by Manufacturer (2018-2023) & (USD Million)
- Table 30. Global Biological 1,3-Propanediol (PDO) Average Price by Manufacturer (2018-2023) & (US\$/Ton)
- Table 31. Market Position of Manufacturers in Biological 1,3-Propanediol (PDO), (Tier 1, Tier 2, and Tier 3), Based on Consumption Value in 2022
- Table 32. Head Office and Biological 1,3-Propanediol (PDO) Production Site of Key Manufacturer
- Table 33. Biological 1,3-Propanediol (PDO) Market: Company Product Type Footprint
- Table 34. Biological 1,3-Propanediol (PDO) Market: Company Product Application Footprint
- Table 35. Biological 1,3-Propanediol (PDO) New Market Entrants and Barriers to Market Entry
- Table 36. Biological 1,3-Propanediol (PDO) Mergers, Acquisition, Agreements, and Collaborations
- Table 37. Global Biological 1,3-Propanediol (PDO) Sales Quantity by Region (2018-2023) & (Tons)
- Table 38. Global Biological 1,3-Propanediol (PDO) Sales Quantity by Region (2024-2029) & (Tons)
- Table 39. Global Biological 1,3-Propanediol (PDO) Consumption Value by Region (2018-2023) & (USD Million)
- Table 40. Global Biological 1,3-Propanediol (PDO) Consumption Value by Region (2024-2029) & (USD Million)
- Table 41. Global Biological 1,3-Propanediol (PDO) Average Price by Region (2018-2023) & (US\$/Ton)
- Table 42. Global Biological 1,3-Propanediol (PDO) Average Price by Region (2024-2029) & (US\$/Ton)
- Table 43. Global Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2023)



& (Tons)

Table 44. Global Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2024-2029) & (Tons)

Table 45. Global Biological 1,3-Propanediol (PDO) Consumption Value by Type (2018-2023) & (USD Million)

Table 46. Global Biological 1,3-Propanediol (PDO) Consumption Value by Type (2024-2029) & (USD Million)

Table 47. Global Biological 1,3-Propanediol (PDO) Average Price by Type (2018-2023) & (US\$/Ton)

Table 48. Global Biological 1,3-Propanediol (PDO) Average Price by Type (2024-2029) & (US\$/Ton)

Table 49. Global Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2023) & (Tons)

Table 50. Global Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2024-2029) & (Tons)

Table 51. Global Biological 1,3-Propanediol (PDO) Consumption Value by Application (2018-2023) & (USD Million)

Table 52. Global Biological 1,3-Propanediol (PDO) Consumption Value by Application (2024-2029) & (USD Million)

Table 53. Global Biological 1,3-Propanediol (PDO) Average Price by Application (2018-2023) & (US\$/Ton)

Table 54. Global Biological 1,3-Propanediol (PDO) Average Price by Application (2024-2029) & (US\$/Ton)

Table 55. North America Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2023) & (Tons)

Table 56. North America Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2024-2029) & (Tons)

Table 57. North America Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2023) & (Tons)

Table 58. North America Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2024-2029) & (Tons)

Table 59. North America Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2018-2023) & (Tons)

Table 60. North America Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2024-2029) & (Tons)

Table 61. North America Biological 1,3-Propanediol (PDO) Consumption Value by Country (2018-2023) & (USD Million)

Table 62. North America Biological 1,3-Propanediol (PDO) Consumption Value by Country (2024-2029) & (USD Million)



- Table 63. Europe Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2023) & (Tons)
- Table 64. Europe Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2024-2029) & (Tons)
- Table 65. Europe Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2023) & (Tons)
- Table 66. Europe Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2024-2029) & (Tons)
- Table 67. Europe Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2018-2023) & (Tons)
- Table 68. Europe Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2024-2029) & (Tons)
- Table 69. Europe Biological 1,3-Propanediol (PDO) Consumption Value by Country (2018-2023) & (USD Million)
- Table 70. Europe Biological 1,3-Propanediol (PDO) Consumption Value by Country (2024-2029) & (USD Million)
- Table 71. Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2023) & (Tons)
- Table 72. Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2024-2029) & (Tons)
- Table 73. Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2023) & (Tons)
- Table 74. Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2024-2029) & (Tons)
- Table 75. Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity by Region (2018-2023) & (Tons)
- Table 76. Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity by Region (2024-2029) & (Tons)
- Table 77. Asia-Pacific Biological 1,3-Propanediol (PDO) Consumption Value by Region (2018-2023) & (USD Million)
- Table 78. Asia-Pacific Biological 1,3-Propanediol (PDO) Consumption Value by Region (2024-2029) & (USD Million)
- Table 79. South America Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2023) & (Tons)
- Table 80. South America Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2024-2029) & (Tons)
- Table 81. South America Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2023) & (Tons)
- Table 82. South America Biological 1,3-Propanediol (PDO) Sales Quantity by



Application (2024-2029) & (Tons)

Table 83. South America Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2018-2023) & (Tons)

Table 84. South America Biological 1,3-Propanediol (PDO) Sales Quantity by Country (2024-2029) & (Tons)

Table 85. South America Biological 1,3-Propanediol (PDO) Consumption Value by Country (2018-2023) & (USD Million)

Table 86. South America Biological 1,3-Propanediol (PDO) Consumption Value by Country (2024-2029) & (USD Million)

Table 87. Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2018-2023) & (Tons)

Table 88. Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity by Type (2024-2029) & (Tons)

Table 89. Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2018-2023) & (Tons)

Table 90. Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity by Application (2024-2029) & (Tons)

Table 91. Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity by Region (2018-2023) & (Tons)

Table 92. Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity by Region (2024-2029) & (Tons)

Table 93. Middle East & Africa Biological 1,3-Propanediol (PDO) Consumption Value by Region (2018-2023) & (USD Million)

Table 94. Middle East & Africa Biological 1,3-Propanediol (PDO) Consumption Value by Region (2024-2029) & (USD Million)

Table 95. Biological 1,3-Propanediol (PDO) Raw Material

Table 96. Key Manufacturers of Biological 1,3-Propanediol (PDO) Raw Materials

Table 97. Biological 1,3-Propanediol (PDO) Typical Distributors

Table 98. Biological 1,3-Propanediol (PDO) Typical Customers



List Of Figures

LIST OF FIGURES

Figure 1. Biological 1,3-Propanediol (PDO) Picture

Figure 2. Global Biological 1,3-Propanediol (PDO) Consumption Value by Type, (USD Million), 2018 & 2022 & 2029

Figure 3. Global Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Type in 2022

Figure 4. Industrial Grade Examples

Figure 5. Pharmaceutical Grade Examples

Figure 6. Global Biological 1,3-Propanediol (PDO) Consumption Value by Application, (USD Million), 2018 & 2022 & 2029

Figure 7. Global Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Application in 2022

Figure 8. PTT & Polyurethane Examples

Figure 9. Cosmetic Examples

Figure 10. Pharmaceutical Examples

Figure 11. Other Examples

Figure 12. Global Biological 1,3-Propanediol (PDO) Consumption Value, (USD Million): 2018 & 2022 & 2029

Figure 13. Global Biological 1,3-Propanediol (PDO) Consumption Value and Forecast (2018-2029) & (USD Million)

Figure 14. Global Biological 1,3-Propanediol (PDO) Sales Quantity (2018-2029) & (Tons)

Figure 15. Global Biological 1,3-Propanediol (PDO) Average Price (2018-2029) & (US\$/Ton)

Figure 16. Global Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Manufacturer in 2022

Figure 17. Global Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Manufacturer in 2022

Figure 18. Producer Shipments of Biological 1,3-Propanediol (PDO) by Manufacturer Sales Quantity (\$MM) and Market Share (%): 2021

Figure 19. Top 3 Biological 1,3-Propanediol (PDO) Manufacturer (Consumption Value) Market Share in 2022

Figure 20. Top 6 Biological 1,3-Propanediol (PDO) Manufacturer (Consumption Value) Market Share in 2022

Figure 21. Global Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Region (2018-2029)



Figure 22. Global Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Region (2018-2029)

Figure 23. North America Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029) & (USD Million)

Figure 24. Europe Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029) & (USD Million)

Figure 25. Asia-Pacific Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029) & (USD Million)

Figure 26. South America Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029) & (USD Million)

Figure 27. Middle East & Africa Biological 1,3-Propanediol (PDO) Consumption Value (2018-2029) & (USD Million)

Figure 28. Global Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Type (2018-2029)

Figure 29. Global Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Type (2018-2029)

Figure 30. Global Biological 1,3-Propanediol (PDO) Average Price by Type (2018-2029) & (US\$/Ton)

Figure 31. Global Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Application (2018-2029)

Figure 32. Global Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Application (2018-2029)

Figure 33. Global Biological 1,3-Propanediol (PDO) Average Price by Application (2018-2029) & (US\$/Ton)

Figure 34. North America Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Type (2018-2029)

Figure 35. North America Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Application (2018-2029)

Figure 36. North America Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Country (2018-2029)

Figure 37. North America Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Country (2018-2029)

Figure 38. United States Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 39. Canada Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 40. Mexico Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 41. Europe Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by



Type (2018-2029)

Figure 42. Europe Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Application (2018-2029)

Figure 43. Europe Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Country (2018-2029)

Figure 44. Europe Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Country (2018-2029)

Figure 45. Germany Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 46. France Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 47. United Kingdom Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 48. Russia Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 49. Italy Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 50. Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Type (2018-2029)

Figure 51. Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Application (2018-2029)

Figure 52. Asia-Pacific Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Region (2018-2029)

Figure 53. Asia-Pacific Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Region (2018-2029)

Figure 54. China Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 55. Japan Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 56. Korea Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 57. India Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 58. Southeast Asia Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 59. Australia Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 60. South America Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Type (2018-2029)



Figure 61. South America Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Application (2018-2029)

Figure 62. South America Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Country (2018-2029)

Figure 63. South America Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Country (2018-2029)

Figure 64. Brazil Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 65. Argentina Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 66. Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Type (2018-2029)

Figure 67. Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Application (2018-2029)

Figure 68. Middle East & Africa Biological 1,3-Propanediol (PDO) Sales Quantity Market Share by Region (2018-2029)

Figure 69. Middle East & Africa Biological 1,3-Propanediol (PDO) Consumption Value Market Share by Region (2018-2029)

Figure 70. Turkey Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 71. Egypt Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 72. Saudi Arabia Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 73. South Africa Biological 1,3-Propanediol (PDO) Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 74. Biological 1,3-Propanediol (PDO) Market Drivers

Figure 75. Biological 1,3-Propanediol (PDO) Market Restraints

Figure 76. Biological 1,3-Propanediol (PDO) Market Trends

Figure 77. Porters Five Forces Analysis

Figure 78. Manufacturing Cost Structure Analysis of Biological 1,3-Propanediol (PDO) in 2022

Figure 79. Manufacturing Process Analysis of Biological 1,3-Propanediol (PDO)

Figure 80. Biological 1,3-Propanediol (PDO) Industrial Chain

Figure 81. Sales Quantity Channel: Direct to End-User vs Distributors

Figure 82. Direct Channel Pros & Cons

Figure 83. Indirect Channel Pros & Cons

Figure 84. Methodology

Figure 85. Research Process and Data Source



I would like to order

Product name: Global Biological 1,3-Propanediol (PDO) Market 2023 by Manufacturers, Regions, Type

and Application, Forecast to 2029

Product link: https://marketpublishers.com/r/G8C6E4BC1068EN.html

Price: US\$ 3,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G8C6E4BC1068EN.html

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

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer 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 $+44\ 20\ 7900\ 3970$

