

Polyols Market Report by Type (Polyether Polyols, Polyester Polyols), Application (Flexible Polyurethane Foams, Rigid Polyurethane Foams, CASE (Coatings, Adhesives, Sealants & Elastomers), and Others), Industry (Carpet Backing, Packaging, Furniture, Automotive, Building & Construction, Electronics, Footwear, and Others), and Region 2024-2032

<https://marketpublishers.com/r/P7ECBFFB8A37EN.html>

Date: April 2024

Pages: 137

Price: US\$ 3,899.00 (Single User License)

ID: P7ECBFFB8A37EN

Abstracts

The global polyols market size reached US\$ 27.9 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 45.9 Billion by 2032, exhibiting a growth rate (CAGR) of 5.5% during 2024-2032. The market is experiencing steady growth driven by the escalating demand for sustainable foams in various industries, rising focus on the production of effective packaging solutions, and increasing production of bedding and cushions with ergonomic features.

Polyols Market Analysis:

Market Growth and Size: The global polyols market is experiencing moderate growth, on account of the global shift towards sustainable polyurethane foams.

Major Market Drivers: Key factors include the implementation of stringent emission regulations worldwide, which are encouraging polyol manufacturers to adopt plant-based raw materials like rapeseed oil.

Technological Advancements: Ongoing innovations in technology to enhance the efficiency and durability of polyol-based products are propelling the market growth. Moreover, advancements in materials, manufacturing processes, and digital technologies are improving the overall production of polyols.

Industry Applications: Polyols find applications in a wide range of vehicles, including passenger cars and commercial vehicles for manufacturing seats. They are crucial for

creating bedding, cushions, and carpets.

Key Market Trends: Partnerships between automakers and polyol manufacturers are fostering innovation and local production of enhanced car seats.

Geographical Trends: Asia Pacific dominates the market, driven by the rapid adoption of sustainable polyols. However, North America is emerging as a fast-growing market on account of the rising focus on reducing emissions and odor in polyol production.

Competitive Landscape: Key players are investing in research and development (R&D), expanding their global presence, and focusing on sustainability in polyol production.

Challenges and Opportunities: Challenges include the need for continuous raw materials and the fluctuating price of natural raw materials. Nonetheless, opportunities for expanding the applications of polyols, such as the production of rigid foam for insulation in refrigerators, are projected to overcome these challenges.

Polyols Market Trends:

Rising demand for bio-based polyols

At present, there is a focus on the production of bio-based polyols to reduce the carbon footprint and occurrence of pollution. Bio-based polyols are sourced from plant oils, such as rapeseed oil. They are also manufactured by following a special process where a reduction of all carboxyl groups creates primary and particularly high-quality polyols. They are often manufactured by renewable resource technologies, which helps to eliminate unwanted odors and address the demands of various industries by providing excellent performance and high levels of renewable content. Moreover, governing agencies of various countries are implementing stringent regulations to promote the adoption of renewable resources and reduce the environmental impact of industrial processes. They are also providing incentives like tax credits, grants, and subsidies to businesses utilizing bio-based polyols. Apart from this, people prefer highly sustainable and eco-friendly products, thereby driving the demand for bio-based polyols. Bio-based polyols offer comparable or even superior performance characteristics compared to their petroleum-based counterparts. They can be tailored to meet specific requirements, offering a wide range of functionalities suitable for various applications such as polyurethane foams, coatings, adhesives, and elastomers.

Increasing utilization in the packaging industry

The rising demand for sustainable packaging solutions due to the growing environmental concerns and regulatory pressure is impelling the polyols market growth. Polyols are widely utilized for manufacturing polyurethane foams and coatings, which offer flexibility, durability, and moisture resistance. Moreover, polyols-based packaging

solutions help extend the shelf life of various perishable goods and provide enhanced protection during storage and transportation. Polyurethane foams and coatings offer effective cushioning and shock absorption properties, protecting fragile items from damage during handling and shipping. Additionally, polyols-based materials can provide insulation against temperature fluctuations, preserving the freshness and quality of food and pharmaceutical products. As the demand for convenient and sustainable packaging solutions is growing, the packaging industry is increasingly turning to polyols-based materials to meet these requirements while ensuring product integrity and safety.

Development of advanced polyurethanes

Advanced polyurethanes are manufactured to offer superior performance properties. They comprise innovative formulations and can be tailored according to the requirements of industries. They have a high load capacity in both compression and tension. Advanced polyurethanes may undergo a change in shape under a heavy weight but can immediately return to their original shape after the load is removed with minimum compression set in the material. They can also function effectively when used in high-flex applications and possess high tear resistance along with efficient tensile properties. Additionally, advancements in manufacturing processes enable the production of polyurethanes with reduced emissions, lower energy consumption, and improved resource efficiency. These eco-friendly attributes make advanced polyurethanes attractive to industries and people seeking sustainable solutions. Advanced polyurethanes are increasingly getting incorporated with functionalities, such as self-healing, shape memory, antimicrobial activity, and sensing capabilities, to expand their application potential using diverse fields, including healthcare electronics and textiles.

Polyols Industry Segmentation:

IMARC Group provides an analysis of the key trends in each segment of the market, along with forecasts at the global and regional levels for 2024-2032. Our report has categorized the market based on type, application, and industry.

Breakup by Type:

Polyether Polyols

Polyester Polyols

Polyether polyols account for the majority of the market share

The report has provided a detailed breakup and analysis of the market based on the type. This includes polyether polyols and polyester polyols. According to the report, polyether polyols represented the largest segment.

Polyether polyols hold the biggest polyols market share. They are a kind of synthetic oil and are made from ethylene oxide, epoxy propane, epoxy butane, and various other raw materials. They are manufactured by the process of open ring homopolymerisation or copolymerization under the function of a catalyst. They are widely used for the preparation of synthetic detergents with low foaming features. They also have low toxicity and are often employed as drug excipients and emulsifiers, which are often used in oral and nasal sprays and shampoos. They can be used as demulsifiers for crude oil to prevent the formation of hard scales in oil pipelines. Moreover, polyether polyols are utilized as a papermaking additive and bleaching agent to improve the quality of various coated papers.

Polyester polyols are the derivatives of dicarboxylic acids and polyols. They are primarily synthesized from petroleum but can also be manufactured from various types of plant-based oils. Their viscosity generally increases with their molecular weights, and they can impart various properties, including water resistance, abrasion resistance, and cut resistance.

Breakup by Application:

Flexible Polyurethane Foams

Rigid Polyurethane Foams

CASE (Coatings, Adhesives, Sealants & Elastomers)

Others

Flexible polyurethane foams hold the largest share in the industry

A detailed breakup and analysis of the market based on the application have also been provided in the report. This includes flexible polyurethane foams, rigid polyurethane foams, CASE (coatings, adhesives, sealants & elastomers), and others. According to the report, flexible polyurethane foams accounted for the largest market share.

Flexible polyurethane foams represent the largest segment owing to their widespread adoption in the production of mattresses, pillows, furniture cushions, and automotive seating. These foams provide a soft and resilient feel, contouring to the shape of the body to distribute weight evenly and alleviate pressure points. Flexible polyurethane

foams also exhibit durability and resilience to withstand repeated compression. This efficiency ensures long-term performance.

Rigid polyurethane foams are used for manufacturing bedding and cushions as they offer superior support, pressure relief, and comfort. They are often customized to manufacture mattresses and cushions according to the requirements of individuals.

Polyols play a vital role in the formulation of coatings, adhesives, sealants, and elastomers (CASE) due to their versatile properties and compatibility with various chemistries. They offer enhanced durability, flexibility, adhesion, weather resistance, and customization options, enabling their use in diverse applications across industries for bonding, sealing, protection, and functional purposes.

Breakup by Industry:

Carpet Backing

Packaging

Furniture

Automotive

Building & Construction

Electronics

Footwear

Others

Packaging represents the leading market segment

The report has provided a detailed breakup and analysis of the market based on the industry. This includes carpet backing, packaging, furniture, automotive, building & construction, electronics, footwear, and others. According to the report, packaging represented the largest segment.

Packaging represents the biggest market share owing to the rising utilization of polyols for making flexible packaging solutions. Polyols improve the adhesion properties in packaging materials, making them less prone to cracking or breaking during transportation and handling. They are also compatible with various materials like plastic, silicone, paper, and metals. This versatility allows them to be incorporated into different types of packaging solutions. Polyols have hygroscopic properties, meaning they can absorb and retain moisture. This property is valuable in packaging applications where moisture control is crucial, such as pharmaceuticals, food, and electronic components.

By keeping products dry, polyols help maintain their quality and shelf life.

Polyols contribute to the formation of durable and stable carpet backing materials. Polyurethane-based carpet backing made from polyols offers excellent resistance to wear, tear, and deformation, ensuring long-term performance and durability of carpets in high-traffic areas. Moreover, carpet backing formulated with polyols enhances the comfort and cushioning properties of carpets, providing a soft and supportive underfoot feel.

Polyols-based foam cushions and padding provide exceptional comfort and support, enhancing the overall user experience of furniture, such as sofas, chairs, mattresses, and pillows. Polyols enable the formulation of foam materials with a wide range of properties, allowing furniture manufacturers to customize cushioning solutions to meet specific requirements and preferences. By adjusting parameters, such as foam density, firmness, and elasticity, manufacturers can tailor furniture comfort levels to suit different users and applications.

The automotive industry relies on polyols for the manufacturing of car seats. Polyol-based foam materials are used in automotive seating applications as they provide comfort and ergonomic support for drivers and passengers. They provide a comfortable and cushioned seat to the driver and enhance the overall driving experience. They also enable automotive designers to create innovative and stylish interior components that enhance the overall aesthetics and appeal of vehicles. Polyurethane foam manufactured from polyols can be contoured and shaped into various forms and configurations, enabling the manufacturing of custom-designed seats, cushions, armrests, and trim panels.

Polyols-based insulation materials and encapsulants play a crucial role in thermal management applications within electronic devices. These materials provide effective thermal insulation, dissipating heat generated by electronic components and preventing overheating, which can degrade performance and reliability. Polyurethane-based encapsulants formulated with polyols offer superior adhesion, chemical resistance, and dielectric properties, ensuring reliable protection and long-term performance in harsh operating conditions.

Breakup by Region:

Asia Pacific

Europe

North America

Middle East and Africa

Latin America

Asia Pacific leads the market, accounting for the largest polyols market share

The market research report has also provided a comprehensive analysis of all the major regional markets, which include Asia Pacific, Europe, North America, the Middle East and Africa, and Latin America. According to the report, Asia Pacific accounted for the largest market share.

The Asia Pacific polyols market is driven by the increasing adoption of flexible packaging solutions across various industry verticals. The region is witnessing a rise in partnerships and collaborations between automakers and polyol and polyurethane foam manufacturers, fostering innovation and local production of customized and ergonomic car seats. Stringent emissions regulations in China and other countries are encouraging the production of bio-based polyols.

North America maintains a strong presence due to the growing trend of smart polyurethanes. Environmental awareness and government incentives to reduce carbon emissions are propelling the growth of the market.

Europe stands as another key region in the market, owing to the increasing implementation of stricter emissions regulations and preferences for cleaner packaging solutions. Investments in improving the polyol manufacturing procedure are bolstering the market growth.

Latin America exhibits growing potential in the polyols market, fueled by the growing demand for customizable mattresses and cushions among the masses, primarily in countries like Brazil and Mexico. Environmental concerns and the need to reduce urban pollution are driving the adoption of bio-based polyols to manufacture foams.

The Middle East and Africa region is currently experiencing an expansion in this domain attributed to the growing interest in manufacturing polyols from plant oils, which is driving the demand for sustainable polyols.

Leading Key Players in the Polyols Industry:

Key market players are investing in research and development (R&D) efforts to create polyols from various innovative raw materials like soybean and corn starch. They are

also focusing on lowering the overall carbon footprint of polyol production. Leading companies are partnering with luxury automotive manufacturers to make customized, ergonomic, and sustainable car seats and armrests. They are also collaborating with bedding manufacturers to make a wide variety of soft mattresses and orthopedic mattresses and cushions which help to reduce joint pains caused by sleeping. Top companies are emphasizing customer-centric innovation, working closely with customers to make polyol solutions that address specific performance requirements and market trends.

The market research report has provided a comprehensive analysis of the competitive landscape. Detailed profiles of all major companies have also been provided. Some of the key players in the market include:

BASF SE
Royal Dutch Shell Plc
Mitsui Chemicals
Covestro AG
The Dow Chemical Company
Wanhua Chemical Group
Huntsman Corporation
LANXESS AG
Stepan Company
Repsol SA

(Please note that this is only a partial list of the key players, and the complete list is provided in the report.)

Latest News:

December 2023: BASF SE announced the launch of Irgastab® PUR 71, an innovative and advanced anti-scorch solution that improves the performance of polyols and polyurethane foams.

May 2023: Mitsui Chemicals announced that it has established a 50-50 limited liability partnership (LLP) with Sanyo Chemical Industries, Ltd. to solve common complications in the production of polypropylene glycol and polymer polyols.

September 2022: Covestro AG announced the introduction of more sustainable polyether polyols, which are manufactured by using bio-circular feedstock.

Key Questions Answered in This Report

1. What was the size of the global polyols market in 2023?
2. What is the expected growth rate of the global polyols market during 2024-2032?
3. What are the key factors driving the global polyols market?
4. What has been the impact of COVID-19 on the global polyols market?
5. What is the breakup of the global polyols market based on the type?
6. What is the breakup of the global polyols market based on the application?
7. What is the breakup of the global polyols market based on industry?
8. What are the key regions in the global polyols market?
9. Who are the key players/companies in the global polyols market?

Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL POLYOLS MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Breakup by Type
- 5.5 Market Breakup by Application
- 5.6 Market Breakup by Industry
- 5.7 Market Breakup by Region
- 5.8 Market Forecast

6 MARKET BREAKUP BY TYPE

- 6.1 Polyether Polyols
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast

6.2 Polyester Polyols

6.2.1 Market Trends

6.2.2 Market Forecast

7 MARKET BREAKUP BY APPLICATION

7.1 Flexible Polyurethane Foams

7.1.1 Market Trends

7.1.2 Market Forecast

7.2 Rigid Polyurethane Foams

7.2.1 Market Trends

7.2.2 Market Forecast

7.3 CASE (Coatings, Adhesives, Sealants & Elastomers)

7.3.1 Market Trends

7.3.2 Market Forecast

7.4 Others

7.4.1 Market Trends

7.4.2 Market Forecast

8 MARKET BREAKUP BY INDUSTRY

8.1 Carpet Backing

8.1.1 Market Trends

8.1.2 Market Forecast

8.2 Packaging

8.2.1 Market Trends

8.2.2 Market Forecast

8.3 Furniture

8.3.1 Market Trends

8.3.2 Market Forecast

8.4 Automotive

8.4.1 Market Trends

8.4.2 Market Forecast

8.5 Building & Construction

8.5.1 Market Trends

8.5.2 Market Forecast

8.6 Electronics

8.6.1 Market Trends

8.6.2 Market Forecast

8.7 Footwear

8.7.1 Market Trends

8.7.2 Market Forecast

8.8 Others

8.8.1 Market Trends

8.8.2 Market Forecast

9 MARKET BREAKUP BY REGION

9.1 Asia Pacific

9.1.1 Market Trends

9.1.2 Market Forecast

9.2 Europe

9.2.1 Market Trends

9.2.2 Market Forecast

9.3 North America

9.3.1 Market Trends

9.3.2 Market Forecast

9.4 Middle East and Africa

9.4.1 Market Trends

9.4.2 Market Forecast

9.5 Latin America

9.5.1 Market Trends

9.5.2 Market Forecast

10 SWOT ANALYSIS

10.1 Overview

10.2 Strengths

10.3 Weaknesses

10.4 Opportunities

10.5 Threats

11 VALUE CHAIN ANALYSIS

12 PORTER'S FIVE FORCES ANALYSIS

12.1 Overview

12.2 Bargaining Power of Buyers

12.3 Bargaining Power of Suppliers

12.4 Degree of Competition

12.5 Threat of New Entrants

12.6 Threat of Substitutes

13 PRICE ANALYSIS

14 COMPETITIVE LANDSCAPE

14.1 Market Structure

14.2 Key Players

14.3 Profiles of Key Players

14.3.1 BASF SE

14.3.2 Royal Dutch Shell Plc

14.3.3 Mitsui Chemicals

14.3.4 Covestro AG

14.3.5 The Dow Chemical Company

14.3.6 Wanhua Chemical Group

14.3.7 Huntsman Corporation

14.3.8 LANXESS AG

14.3.9 Stepan Company

14.3.10 Repsol SA

List Of Tables

LIST OF TABLES

Table 1: Global: Polyols Market: Key Industry Highlights, 2023 and 2032

Table 2: Global: Polyols Market Forecast: Breakup by Type (in Billion US\$), 2024-2032

Table 3: Global: Polyols Market Forecast: Breakup by Application (in Billion US\$),
2024-2032

Table 4: Global: Polyols Market Forecast: Breakup by Industry (in Billion US\$),
2024-2032

Table 5: Global: Polyols Market Forecast: Breakup by Region (in Billion US\$),
2024-2032

Table 6: Global: Polyols Market: Competitive Structure

Table 7: Global: Polyols Market: Key Players

List Of Figures

LIST OF FIGURES

- Figure 1: Global: Polyols Market: Major Drivers and Challenges
- Figure 2: Global: Polyols Market: Sales Value (in Billion US\$), 2018-2023
- Figure 3: Global: Polyols Market: Breakup by Type (in %), 2023
- Figure 4: Global: Polyols Market: Breakup by Application (in %), 2023
- Figure 5: Global: Polyols Market: Breakup by Industry (in %), 2023
- Figure 6: Global: Polyols Market: Breakup by Region (in %), 2023
- Figure 7: Global: Polyols Market Forecast: Sales Value (in Billion US\$), 2024-2032
- Figure 8: Global: Polyols Industry: SWOT Analysis
- Figure 9: Global: Polyols Industry: Value Chain Analysis
- Figure 10: Global: Polyols Industry: Porter's Five Forces Analysis
- Figure 11: Global: Polyols (Polyether) Market: Sales Value (in Billion US\$), 2018 & 2023
- Figure 12: Global: Polyols (Polyether) Market Forecast: Sales Value (in Billion US\$), 2024-2032
- Figure 13: Global: Polyols (Polyester) Market: Sales Value (in Billion US\$), 2018 & 2023
- Figure 14: Global: Polyols (Polyester) Market Forecast: Sales Value (in Billion US\$), 2024-2032
- Figure 15: Global: Polyols (Flexible Polyurethane Foams) Market: Sales Value (in Billion US\$), 2018 & 2023
- Figure 16: Global: Polyols (Flexible Polyurethane Foams) Market Forecast: Sales Value (in Billion US\$), 2024-2032
- Figure 17: Global: Polyols (Rigid Polyurethane Foams) Market: Sales Value (in Billion US\$), 2018 & 2023
- Figure 18: Global: Polyols (Rigid Polyurethane Foams) Market Forecast: Sales Value (in Billion US\$), 2024-2032
- Figure 19: Global: Polyols (CASE) Market: Sales Value (in Billion US\$), 2018 & 2023
- Figure 20: Global: Polyols (CASE) Market Forecast: Sales Value (in Billion US\$), 2024-2032
- Figure 21: Global: Polyols (Other Applications) Market: Sales Value (in Billion US\$), 2018 & 2023
- Figure 22: Global: Polyols (Other Applications) Market Forecast: Sales Value (in Billion US\$), 2024-2032
- Figure 23: Global: Polyols (Carpet Backing) Market: Sales Value (in Billion US\$), 2018 & 2023
- Figure 24: Global: Polyols (Carpet Backing) Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 25: Global: Polyols (Packaging) Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 26: Global: Polyols (Packaging) Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 27: Global: Polyols (Furniture) Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 28: Global: Polyols (Furniture) Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 29: Global: Polyols (Automotive) Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 30: Global: Polyols (Automotive) Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 31: Global: Polyols (Building & Construction) Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 32: Global: Polyols (Building & Construction) Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 33: Global: Polyols (Electronics) Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 34: Global: Polyols (Electronics) Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 35: Global: Polyols (Footwear) Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 36: Global: Polyols (Footwear) Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 37: Global: Polyols (Other Industries) Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 38: Global: Polyols (Other Industries) Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 39: Asia Pacific: Polyols Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 40: Asia Pacific: Polyols Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 41: Europe: Polyols Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 42: Europe: Polyols Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 43: North America: Polyols Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 44: North America: Polyols Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 45: Middle East and Africa: Polyols Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 46: Middle East and Africa: Polyols Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 47: Latin America: Polyols Market: Sales Value (in Billion US\$), 2018 & 2023

Figure 48: Latin America: Polyols Market Forecast: Sales Value (in Billion US\$),
2024-2032

I would like to order

Product name: Polyols Market Report by Type (Polyether Polyols, Polyester Polyols), Application (Flexible Polyurethane Foams, Rigid Polyurethane Foams, CASE (Coatings, Adhesives, Sealants & Elastomers), and Others), Industry (Carpet Backing, Packaging, Furniture, Automotive, Building & Construction, Electronics, Footwear, and Others), and Region 2024-2032

Product link: <https://marketpublishers.com/r/P7ECBFFB8A37EN.html>

Price: US\$ 3,899.00 (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/P7ECBFFB8A37EN.html>