

Pharmaceutical Membrane Filtration Market by Product (Filters (PES, PVDF, Nylon), Systems (Single use)), Technique (Microfiltration, Ultrafiltration), Application (API, Vaccines), Type (Sterile, Non Sterile), Scale of Operation - Global Forecast to 2029

<https://marketpublishers.com/r/PA3CF9A1203EN.html>

Date: March 2024

Pages: 477

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

ID: PA3CF9A1203EN

Abstracts

The global pharmaceutical membrane filtration market is projected to reach USD 19.6 billion by 2029 from USD 10.6 billion in 2024, at a CAGR of 13.1% during the forecast period of 2024 to 2029. The growth of this market can be attributed to increasing purity requirements in end-use industries. In the life sciences industry, ultrapure water is essential for genomics, proteomics, immunology, pharmacology, cell and tissue culture, and drug discovery. Due to the increasing demand for Type I, ultrapure, or research-grade water in life science research, pure lab water supply has become one of the most important and fastest-growing markets in the laboratory industry. This trend is expected to drive the growth of the pharmaceutical membrane filtration market in the coming years.

“The sterile filtration segment accounted for the largest share by type in 2023.”

In 2023, the sterile filtration segment accounted for the largest share by type in the global pharmaceutical membrane filtration market. Sterile filtration is the process of microbial removal and plays an important role in assuring final product sterility. Sterile filters are widely used for the intermediate and final filtration of liquid drug products. According to regulatory authorities, sterile-grade filters are required for the final product processing of drugs and are of utmost importance during final product processing. Moreover, there are various advantages of sterile filters over non-sterile filters, which make them the preferred choice for upstream and downstream processing in the pharmaceutical and biopharmaceutical industries.

“The US has continued to dominate the pharmaceutical membrane filtration market during the forecast period of 2024-2029.”

The US dominated the pharmaceutical membrane filtration market in North America in 2023. The US is the world's largest biopharmaceutical market and a leader in biopharmaceutical research/investments. Additionally, the US is home to some of the world's leading academic research institutes, including Harvard University, Stanford University, and the Massachusetts Institute of Technology (MIT). These institutes conduct cutting-edge research in life sciences, including drug discovery, genomics, and biotechnology, which require the use of membrane filtration products. Technological advancements in filtration membranes and the increasing number of patents are also driving the adoption of filtration in the pharmaceutical and biotechnology industries.

The primary interviews conducted for this report can be categorized as follows:

By Respondent: Supply Side- 70% and Demand Side 30%

By Designation: Managers - 45%, CXO & Directors - 30%, and Executives - 25%

By Region: North America -40%, Europe -25%, Asia-Pacific -20%, Latin America -10% and Middle East & Africa- 5%

List of Companies Profiled in the Report:

Thermo Fisher Scientific Inc. (US)

Merck KGaA (Germany)

Danaher Corporation (US)

Sartorius AG (Germany)

Thermo Fisher Scientific, Inc. (US)

3M Company (US)

Parker Hannifin Corporation (US)

Repligen Corporation (US)

Asahi Kasei Corporation (Japan)

Eaton Corporation plc (Ireland)

GEA Group (Germany)

Corning Incorporated (US)

Alfa Laval Corporate AB (Sweden)

Donaldson Company, Inc. (US)

Saint-Gobain (France)

MANN+HUMMEL International GmbH & Co. KG (Germany)

Meissner Filtration Products, Inc. (US)

Cole-Parmer Instrument Company, LLC (US)

Applexion (France)

Cantel Medical Corp. (US)

W. L. Gore & Associates Inc. (US)

Membrane Solutions (US)

Amazon Filters Ltd. (UK)

Toyo Roshi Kaisha, Ltd. (Japan)

Porvair plc (UK)

Sterlitech Corporation (US)

Synder Filtration, Inc. (US)

Graver Technologies, LLC (US)

Koch Membrane Systems, Inc. (US)

Nupore Filtration Systems (India)

Cobetter Filtration Equipment Co., Ltd. (China).

Research Coverage:

This research report categorizes the pharmaceutical membrane filtration market by product (membrane filters, systems, and other products), by technique (microfiltration, ultrafiltration, nanofiltration, and other techniques), by application (final product processing, raw material filtration, cell separation, water purification, and air purification), by type (sterile filtration and non-sterile filtration), by scale of operation (manufacturing scale operation, pilot scale operation, and R&D scale operation) and by region (North America, Europe, Asia Pacific, Latin America, Middle East and Africa). The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the pharmaceutical membrane filtration market. A detailed analysis of the key industry players has been done to provide insights into their business overview, products, solutions, key strategies, collaborations, partnerships, and agreements. New launches, collaborations and acquisitions, and recent developments associated with the pharmaceutical membrane filtration market.

Key Benefits of Buying the Report:

The report will help market leaders/new entrants by providing them with the closest approximations of the revenue numbers for the overall pharmaceutical membrane filtration market and its subsegments. It will also help stakeholders better understand the competitive landscape and gain more insights to better position their business and make suitable go-to-market strategies. This report will enable stakeholders to understand the market's pulse and provide them with information on the key market drivers, restraints, opportunities, and challenges.

The report provides insights on the following pointers:

Analysis of key drivers (increasing adoption of single-use technologies, stringent regulatory requirements, rising R&D spending in pharmaceutical and biotechnology industries, and increasing purity requirements in end-use industries), restraints (membrane fouling issues and high capital investment requirements to limit entry of smaller players), opportunities (growing opportunities in emerging economies, advances in nanofiltration technology), and Challenges (increased cost and reduced speed & yield of filters) influencing the growth of the market.

Product Development/Innovation: Detailed insights on newly launched products of the pharmaceutical membrane filtration market

Market Development: Comprehensive information about lucrative markets - the report analyses the market across varied regions.

Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the pharmaceutical membrane filtration market

Competitive Assessment: Merck KGaA (Germany), Danaher Corporation (US), Sartorius AG (Germany), Thermo Fisher Scientific, Inc. (US), 3M Company (US), Parker Hannifin Corporation (US), Repligen Corporation (US), Asahi Kasei Corporation (Japan), Eaton Corporation plc (Ireland), GEA Group (Germany), Corning Incorporated (US), Alfa Laval Corporate AB (Sweden), Donaldson Company, Inc. (US), among others in the market.

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11.3.4.1 Rising research activities in pharma R&D to boost market growth

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TABLE 409 JAPAN: PHARMACEUTICAL MEMBRANE FILTRATION SYSTEMS MARKET, BY TYPE, 2022 2029 (USD MILLION)

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TABLE 419 INDIA: PHARMACEUTICAL MEMBRANE FILTRATION SYSTEMS MARKET, BY TYPE, 2022 2029 (USD MILLION)

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TABLE 426 INDIA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY SCALE OF OPERATION, 2022 2029 (USD MILLION)

11.4.4 SOUTH KOREA

11.4.4.1 Increased export of drugs to support market growth

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TABLE 428 SOUTH KOREA: PHARMACEUTICAL MEMBRANE FILTERS MARKET, BY TYPE, 2022 2029 (USD MILLION)

TABLE 429 SOUTH KOREA: PHARMACEUTICAL MEMBRANE FILTRATION SYSTEMS MARKET, BY TYPE, 2022 2029 (USD MILLION)

TABLE 430 SOUTH KOREA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET FOR OTHER PRODUCTS, BY TYPE, 2022 2029 (USD MILLION)

TABLE 431 SOUTH KOREA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY TECHNIQUE, 2022 2029 (USD MILLION)

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TABLE 434 SOUTH KOREA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET FOR RAW MATERIAL FILTRATION, BY TYPE, 2022 2029 (USD MILLION)

TABLE 435 SOUTH KOREA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY TYPE, 2022 2029 (USD MILLION)

TABLE 436 SOUTH KOREA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY SCALE OF OPERATION, 2022 2029 (USD MILLION)

11.4.5 AUSTRALIA

11.4.5.1 Increasing demand for innovative filtration solutions to propel market

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TABLE 438 AUSTRALIA: PHARMACEUTICAL MEMBRANE FILTERS MARKET, BY TYPE, 2022 2029 (USD MILLION)

TABLE 439 AUSTRALIA: PHARMACEUTICAL MEMBRANE FILTRATION SYSTEMS MARKET, BY TYPE, 2022 2029 (USD MILLION)

TABLE 440 AUSTRALIA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET FOR OTHER PRODUCTS, BY TYPE, 2022 2029 (USD MILLION)

TABLE 441 AUSTRALIA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY TECHNIQUE, 2022 2029 (USD MILLION)

TABLE 442 AUSTRALIA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY APPLICATION, 2022 2029 (USD MILLION)

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TABLE 446 AUSTRALIA: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY SCALE OF OPERATION, 2022 2029 (USD MILLION)

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TABLE 447 REST OF ASIA PACIFIC: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY PRODUCT, 2022 2029 (USD MILLION)

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TABLE 451 REST OF ASIA PACIFIC: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY TECHNIQUE, 2022 2029 (USD MILLION)

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TABLE 456 REST OF ASIA PACIFIC: PHARMACEUTICAL MEMBRANE FILTRATION

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11.4.7 ASIA PACIFIC: RECESSION IMPACT

11.5 LATIN AMERICA

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TABLE 458 LATIN AMERICA: PHARMACEUTICAL MEMBRANE FILTRATION

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TABLE 459 LATIN AMERICA: PHARMACEUTICAL MEMBRANE FILTERS MARKET,
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TABLE 460 LATIN AMERICA: PHARMACEUTICAL MEMBRANE FILTRATION
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TABLE 461 LATIN AMERICA: PHARMACEUTICAL MEMBRANE FILTRATION
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TABLE 462 LATIN AMERICA: PHARMACEUTICAL MEMBRANE FILTRATION
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TABLE 463 LATIN AMERICA: PHARMACEUTICAL MEMBRANE FILTRATION
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TABLE 465 LATIN AMERICA: PHARMACEUTICAL MEMBRANE FILTRATION
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TABLE 467 LATIN AMERICA: PHARMACEUTICAL MEMBRANE FILTRATION
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11.5.1.1 Growth of vaccine manufacturing to drive market

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TABLE 469 BRAZIL: PHARMACEUTICAL MEMBRANE FILTERS MARKET, BY TYPE,
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TABLE 470 BRAZIL: PHARMACEUTICAL MEMBRANE FILTRATION SYSTEMS
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TABLE 472 BRAZIL: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY
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TABLE 477 BRAZIL: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY SCALE OF OPERATION, 2022 2029 (USD MILLION)

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11.5.2.1 Rising demand for chronic disease treatment to support market growth

TABLE 478 MEXICO: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY PRODUCT, 2022 2029 (USD MILLION)

TABLE 479 MEXICO: PHARMACEUTICAL MEMBRANE FILTERS MARKET, BY TYPE, 2022 2029 (USD MILLION)

TABLE 480 MEXICO: PHARMACEUTICAL MEMBRANE FILTRATION SYSTEMS MARKET, BY TYPE, 2022 2029 (USD MILLION)

TABLE 481 MEXICO: PHARMACEUTICAL MEMBRANE FILTRATION MARKET FOR OTHER PRODUCTS, BY TYPE, 2022 2029 (USD MILLION)

TABLE 482 MEXICO: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY TECHNIQUE, 2022 2029 (USD MILLION)

TABLE 483 MEXICO: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY APPLICATION, 2022 2029 (USD MILLION)

TABLE 484 MEXICO: PHARMACEUTICAL MEMBRANE FILTRATION MARKET FOR FINAL PRODUCT PROCESSING, BY TYPE, 2022 2029 (USD MILLION)

TABLE 485 MEXICO: PHARMACEUTICAL MEMBRANE FILTRATION MARKET FOR RAW MATERIAL FILTRATION, BY TYPE, 2022 2029 (USD MILLION)

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TABLE 487 MEXICO: PHARMACEUTICAL MEMBRANE FILTRATION MARKET, BY SCALE OF OPERATION, 2022 2029 (USD MILLION)

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