

Reverse Osmosis (RO) Membrane Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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Abstracts

Market Overview:

The global reverse osmosis (RO) membrane market size reached US\$ 3.8 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 7.3 Billion by 2028, exhibiting a growth rate (CAGR) of 11.8% during 2023-2028.

Reverse osmosis (RO) refers to a technology that deionizes or purifies water by pushing it through a semi-permeable membrane under high pressure. The RO membrane is a thin layer of filtering material that separates contaminating agents and dissolved salts from drinking water. It consists of three layers, namely a polyester support web, a microporous polysulfone interlayer and an ultra-thin polyamide barrier layer. These membranes can be used in both industrial processes and for obtaining potable water. Nowadays, they are increasingly being used across the globe for water purification, as the RO process offers an environment-friendly and cost-effective alternative to the conventionally used techniques such as distillation and evaporation.

In recent years, the rising pollution levels, industrial development, population growth, and climate change have resulted in the high demand for clean and fresh water worldwide. This, in turn, has prompted consumers to opt for numerous water filtration technologies, the most preferred among which is RO. Additionally, a significant number of countries are employing seawater desalination, which relies on the process of RO for removing the excessive amount of salt from water to make it fit for use. Apart from this, the governments of various nations are spreading awareness among the masses about water-borne diseases and promoting the use of water filtration systems. Moreover, the leading companies are developing hybrid and advanced membrane technologies that

can provide longer membrane life and lower the replacement rate. These advancements are expected to escalate the utilization of RO membranes in power plants, municipal water treatment, and mining and chemical industries.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global reverse osmosis (RO) membrane market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on material type, filter module and end-use.

Breakup by Material Type:

- Cellulose-Based Membranes
- Cellulose Acetate (CA) Membranes
- Nitrocellulose Membranes
- Thin Film Composite Membranes
- Polyamide (PA) Composite Membranes
- GO-Based Polyacrylonitrile Membrane

Breakup by Filter Module:

- Plate and Frame (PF)
- Spiral
- Pillow-Shaped
- Tubular-Shaped
- Spiral-Wound
- Hollow-Fiber

Breakup by End-Use:

- Desalination Systems
- Seawater
- Brackish Water
- Ro Purification Systems
- Residential and Commercial
- Municipal
- Industrial
- Medical Devices and Diagnostics

Breakup by Region:

North America

United States

Canada

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

Competitive Landscape:

The competitive landscape of the industry has also been examined with some of the key players being Axeon Water Technologies, Dow Water & Process Solutions Inc., GE Water & Process Technologies, Hydranautics (A Nitto Denko Group Company), Keensen Technology Co. Ltd., Lanxess, LG Chem, Microdyn-Nadir GmbH, Toray Industries Inc., Toyobo Co. Ltd. and Vontron Membrane Technology Co. Ltd.

Key Questions Answered in This Report:

How has the global reverse osmosis membrane market performed so far and how will it perform in the coming years?

What are the key regional markets?

What has been the impact of COVID-19 on the global reverse osmosis membrane

market?

What is the breakup of the market based on the material type?

What is the breakup of the market based on the filter module?

What is the breakup of the market based on the end-use?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global reverse osmosis membrane market and who are the key players?

What is the degree of competition in the industry?

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