

# Global DLE Membrane Materials Supply, Demand and Key Producers, 2026-2032

<https://marketpublishers.com/r/G57D88CE0388EN.html>

Date: July 2026

Pages: 121

Price: US\$ 4,480.00 (Single User License)

ID: G57D88CE0388EN

## Abstracts

The global DLE Membrane Materials market size is expected to reach \$ 760 million by 2032, rising at a market growth of 18.3% CAGR during the forecast period (2026-2032).

DLE membrane materials are functional membranes, membrane elements, and membrane stack materials used in direct lithium extraction processes to enable selective lithium-ion transport, valence or size-based separation, magnesium?lithium separation, brine concentration, and electrochemical conversion. The product's gross margin is approximately 42%.

Demand mainly comes from commercial lithium extraction projects using salt lake brines, geothermal brines, and oil and gas produced water resources. Compared with evaporation pond routes, DLE places greater emphasis on continuous operation, low land use, and high recovery rates. The use of membrane materials continues to increase in magnesium?lithium separation, low-grade brine concentration, water recovery, and electrochemical conversion steps.

The supply side is divided into two groups: one consists of established membrane and water treatment companies such as DuPont, Kovalus, and LiqTech, which provide nanofiltration, reverse osmosis, ceramic pretreatment, and concentration modules; the other consists of project-driven lithium-selective or electrically driven membrane technology companies such as EnergyX, Evove, ElectraLith, and alkaLi. Current competition depends not only on membrane flux and selectivity, but also on fouling resistance, high-salinity tolerance, membrane stack scale-up, and compatibility with adsorption, extraction, and crystallization units.

As DLE projects advance in North America, South America, and Europe, procurement

of membrane elements and membrane stacks is increasing. In the short term, the market is highly affected by lithium prices and project financing pace, but in the long term, high Mg/Li ratios, low lithium concentrations, and water-scarce regions will continue to drive higher-selectivity membrane materials to replace some traditional concentration and impurity removal processes.

This report studies the global DLE Membrane Materials production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for DLE Membrane Materials and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of DLE Membrane Materials that contribute to its increasing demand across many markets.

#### Highlights and key features of the study

Global DLE Membrane Materials total production and demand, 2021-2032, (Sq m)

Global DLE Membrane Materials total production value, 2021-2032, (USD Million)

Global DLE Membrane Materials production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Sq m), (based on production site)

Global DLE Membrane Materials consumption by region & country, CAGR, 2021-2032 & (Sq m)

U.S. VS China: DLE Membrane Materials domestic production, consumption, key domestic manufacturers and share

Global DLE Membrane Materials production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Sq m)

Global DLE Membrane Materials production by Type, production, value, CAGR, 2021-2032, (USD Million) & (Sq m)

Global DLE Membrane Materials production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Sq m)

This report profiles key players in the global DLE Membrane Materials 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, EnergyX, Evove, ElectraLith, Saltworks Technologies, Gradiant, alkaLi, Kovalus Separation Solutions, LiqTech, NORAM Electrolysis Systems, etc.

This report also provides key insights about market drivers, restraints, opportunities,

new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World DLE Membrane Materials market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (Sq m) and average price (US\$/Sq m) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global DLE Membrane Materials Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global DLE Membrane Materials Market, Segmentation by Type:

Lithium-Selective Membrane

Monovalent-Selective Ion-Exchange Membrane

Nanofiltration Membrane

Reverse Osmosis Concentration Membrane

Electrochemical Membrane

Pretreatment Ceramic Membrane

Other

Global DLE Membrane Materials Market, Segmentation by Membrane Material Structure:

Polyamide Thin-Film Composite

Ion-Exchange Polymer

Bipolar Membrane

Inorganic Ceramic Composite

Nanochannel Composite

Coated Commercial Membrane

Other

Global DLE Membrane Materials Market, Segmentation by Module Form:

Spiral-Wound Element

Flat-Sheet Stack

Plate-Frame Module

Hollow-Fiber Module

Tubular Ceramic Module

Custom Membrane Stack

Other

#### Global DLE Membrane Materials Market, Segmentation by Process Position:

Primary Lithium Capture

Mg-Li Separation

Brine Concentration

Fouling Pretreatment

Electrolytic Conversion

Water Recovery

Other

#### Global DLE Membrane Materials Market, Segmentation by Application:

Salt-Lake Brine DLE

Geothermal Brine DLE

Oilfield Produced-Water Lithium Recovery

Clay Leachate Lithium Purification

DLE Pilot and Demonstration Plants

Battery-Grade Lithium Hydroxide Refining

Brine Pretreatment for DLE

## Companies Profiled:

DuPont

EnergyX

Evove

ElectraLith

Saltworks Technologies

Gradiant

alkaLi

Kovalus Separation Solutions

LiqTech

NORAM Electrolysis Systems

De Nora

Ionomr Innovations

SLB

## Key Questions Answered:

1. How big is the global DLE Membrane Materials market?
2. What is the demand of the global DLE Membrane Materials market?
3. What is the year over year growth of the global DLE Membrane Materials market?
4. What is the production and production value of the global DLE Membrane Materials market?
5. Who are the key producers in the global DLE Membrane Materials market?
6. What are the growth factors driving the market demand?

## Contents

### 1 SUPPLY SUMMARY

- 1.1 DLE Membrane Materials Introduction
- 1.2 World DLE Membrane Materials Supply & Forecast
  - 1.2.1 World DLE Membrane Materials Production Value (2021 & 2025 & 2032)
  - 1.2.2 World DLE Membrane Materials Production (2021-2032)
  - 1.2.3 World DLE Membrane Materials Pricing Trends (2021-2032)
- 1.3 World DLE Membrane Materials Production by Region (Based on Production Site)
  - 1.3.1 World DLE Membrane Materials Production Value by Region (2021-2032)
  - 1.3.2 World DLE Membrane Materials Production by Region (2021-2032)
  - 1.3.3 World DLE Membrane Materials Average Price by Region (2021-2032)
  - 1.3.4 North America DLE Membrane Materials Production (2021-2032)
  - 1.3.5 Europe DLE Membrane Materials Production (2021-2032)
- 1.4 Market Drivers, Restraints and Trends
  - 1.4.1 DLE Membrane Materials Market Drivers
  - 1.4.2 Factors Affecting Demand
  - 1.4.3 DLE Membrane Materials Major Market Trends

### 2 DEMAND SUMMARY

- 2.1 World DLE Membrane Materials Demand (2021-2032)
- 2.2 World DLE Membrane Materials Consumption by Region
  - 2.2.1 World DLE Membrane Materials Consumption by Region (2021-2026)
  - 2.2.2 World DLE Membrane Materials Consumption Forecast by Region (2027-2032)
- 2.3 United States DLE Membrane Materials Consumption (2021-2032)
- 2.4 China DLE Membrane Materials Consumption (2021-2032)
- 2.5 Europe DLE Membrane Materials Consumption (2021-2032)
- 2.6 Japan DLE Membrane Materials Consumption (2021-2032)
- 2.7 South Korea DLE Membrane Materials Consumption (2021-2032)
- 2.8 ASEAN DLE Membrane Materials Consumption (2021-2032)
- 2.9 India DLE Membrane Materials Consumption (2021-2032)

### 3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS

- 3.1 World DLE Membrane Materials Production Value by Manufacturer (2021-2026)
- 3.2 World DLE Membrane Materials Production by Manufacturer (2021-2026)
- 3.3 World DLE Membrane Materials Average Price by Manufacturer (2021-2026)

- 3.4 DLE Membrane Materials Company Evaluation Quadrant
- 3.5 Industry Rank and Concentration Rate (CR)
  - 3.5.1 Global DLE Membrane Materials Industry Rank of Major Manufacturers
  - 3.5.2 Global Concentration Ratios (CR4) for DLE Membrane Materials in 2025
  - 3.5.3 Global Concentration Ratios (CR8) for DLE Membrane Materials in 2025
- 3.6 DLE Membrane Materials Market: Overall Company Footprint Analysis
  - 3.6.1 DLE Membrane Materials Market: Region Footprint
  - 3.6.2 DLE Membrane Materials Market: Company Product Type Footprint
  - 3.6.3 DLE Membrane Materials Market: Company Product Application Footprint
- 3.7 Competitive Environment
  - 3.7.1 Historical Structure of the Industry
  - 3.7.2 Barriers of Market Entry
  - 3.7.3 Factors of Competition
- 3.8 New Entrant and Capacity Expansion Plans
- 3.9 Mergers, Acquisition, Agreements, and Collaborations

## **4 UNITED STATES VS CHINA VS REST OF THE WORLD**

- 4.1 United States VS China: DLE Membrane Materials Production Value Comparison
  - 4.1.1 United States VS China: DLE Membrane Materials Production Value Comparison (2021 & 2025 & 2032)
  - 4.1.2 United States VS China: DLE Membrane Materials Production Value Market Share Comparison (2021 & 2025 & 2032)
- 4.2 United States VS China: DLE Membrane Materials Production Comparison
  - 4.2.1 United States VS China: DLE Membrane Materials Production Comparison (2021 & 2025 & 2032)
  - 4.2.2 United States VS China: DLE Membrane Materials Production Market Share Comparison (2021 & 2025 & 2032)
- 4.3 United States VS China: DLE Membrane Materials Consumption Comparison
  - 4.3.1 United States VS China: DLE Membrane Materials Consumption Comparison (2021 & 2025 & 2032)
  - 4.3.2 United States VS China: DLE Membrane Materials Consumption Market Share Comparison (2021 & 2025 & 2032)
- 4.4 United States Based DLE Membrane Materials Manufacturers and Market Share, 2021-2026
  - 4.4.1 United States Based DLE Membrane Materials Manufacturers, Headquarters and Production Site (States, Country)
  - 4.4.2 United States Based Manufacturers DLE Membrane Materials Production Value (2021-2026)



4.4.3 United States Based Manufacturers DLE Membrane Materials Production (2021-2026)

4.5 China Based DLE Membrane Materials Manufacturers and Market Share

4.5.1 China Based DLE Membrane Materials Manufacturers, Headquarters and Production Site (Province, Country)

4.5.2 China Based Manufacturers DLE Membrane Materials Production Value (2021-2026)

4.5.3 China Based Manufacturers DLE Membrane Materials Production (2021-2026)

4.6 Rest of World Based DLE Membrane Materials Manufacturers and Market Share, 2021-2026

4.6.1 Rest of World Based DLE Membrane Materials Manufacturers, Headquarters and Production Site (State, Country)

4.6.2 Rest of World Based Manufacturers DLE Membrane Materials Production Value (2021-2026)

4.6.3 Rest of World Based Manufacturers DLE Membrane Materials Production (2021-2026)

## **5 MARKET ANALYSIS BY TYPE**

5.1 World DLE Membrane Materials Market Size Overview by Type: 2021 VS 2025 VS 2032

5.2 Segment Introduction by Type

5.2.1 Lithium-Selective Membrane

5.2.2 Monovalent-Selective Ion-Exchange Membrane

5.2.3 Nanofiltration Membrane

5.2.4 Reverse Osmosis Concentration Membrane

5.2.5 Electrochemical Membrane

5.2.6 Pretreatment Ceramic Membrane

5.2.7 Other

5.3 Market Segment by Type

5.3.1 World DLE Membrane Materials Production by Type (2021-2032)

5.3.2 World DLE Membrane Materials Production Value by Type (2021-2032)

5.3.3 World DLE Membrane Materials Average Price by Type (2021-2032)

## **6 MARKET ANALYSIS BY MEMBRANE MATERIAL STRUCTURE**

6.1 World DLE Membrane Materials Market Size Overview by Membrane Material Structure: 2021 VS 2025 VS 2032

6.2 Segment Introduction by Membrane Material Structure

- 6.2.1 Polyamide Thin-Film Composite
- 6.2.2 Ion-Exchange Polymer
- 6.2.3 Bipolar Membrane
- 6.2.4 Inorganic Ceramic Composite
- 6.2.5 Nanochannel Composite
- 6.2.6 Coated Commercial Membrane
- 6.2.7 Other
- 6.3 Market Segment by Membrane Material Structure
  - 6.3.1 World DLE Membrane Materials Production by Membrane Material Structure (2021-2032)
  - 6.3.2 World DLE Membrane Materials Production Value by Membrane Material Structure (2021-2032)
  - 6.3.3 World DLE Membrane Materials Average Price by Membrane Material Structure (2021-2032)

## **7 MARKET ANALYSIS BY MODULE FORM**

- 7.1 World DLE Membrane Materials Market Size Overview by Module Form: 2021 VS 2025 VS 2032
- 7.2 Segment Introduction by Module Form
  - 7.2.1 Spiral-Wound Element
  - 7.2.2 Flat-Sheet Stack
  - 7.2.3 Plate-Frame Module
  - 7.2.4 Hollow-Fiber Module
  - 7.2.5 Tubular Ceramic Module
  - 7.2.6 Custom Membrane Stack
  - 7.2.7 Other
- 7.3 Market Segment by Module Form
  - 7.3.1 World DLE Membrane Materials Production by Module Form (2021-2032)
  - 7.3.2 World DLE Membrane Materials Production Value by Module Form (2021-2032)
  - 7.3.3 World DLE Membrane Materials Average Price by Module Form (2021-2032)

## **8 MARKET ANALYSIS BY PROCESS POSITION**

- 8.1 World DLE Membrane Materials Market Size Overview by Process Position: 2021 VS 2025 VS 2032
- 8.2 Segment Introduction by Process Position
  - 8.2.1 Primary Lithium Capture
  - 8.2.2 Mg-Li Separation

- 8.2.3 Brine Concentration
- 8.2.4 Fouling Pretreatment
- 8.2.5 Electrolytic Conversion
- 8.2.6 Water Recovery
- 8.2.7 Other

### 8.3 Market Segment by Process Position

- 8.3.1 World DLE Membrane Materials Production by Process Position (2021-2032)
- 8.3.2 World DLE Membrane Materials Production Value by Process Position (2021-2032)
- 8.3.3 World DLE Membrane Materials Average Price by Process Position (2021-2032)

## 9 MARKET ANALYSIS BY APPLICATION

### 9.1 World DLE Membrane Materials Market Size Overview by Application: 2021 VS 2025 VS 2032

### 9.2 Segment Introduction by Application

- 9.2.1 Salt-Lake Brine DLE
- 9.2.2 Geothermal Brine DLE
- 9.2.3 Oilfield Produced-Water Lithium Recovery
- 9.2.4 Clay Leachate Lithium Purification
- 9.2.5 DLE Pilot and Demonstration Plants
- 9.2.6 Battery-Grade Lithium Hydroxide Refining
- 9.2.7 Brine Pretreatment for DLE

### 9.3 Market Segment by Application

- 9.3.1 World DLE Membrane Materials Production by Application (2021-2032)
- 9.3.2 World DLE Membrane Materials Production Value by Application (2021-2032)
- 9.3.3 World DLE Membrane Materials Average Price by Application (2021-2032)

## 10 COMPANY PROFILES

### 10.1 DuPont

- 10.1.1 DuPont Details
  - 10.1.2 DuPont Major Business
  - 10.1.3 DuPont DLE Membrane Materials Product and Services
  - 10.1.4 DuPont DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 10.1.5 DuPont Recent Developments/Updates
  - 10.1.6 DuPont Competitive Strengths & Weaknesses
- ### 10.2 EnergyX

- 10.2.1 EnergyX Details
- 10.2.2 EnergyX Major Business
- 10.2.3 EnergyX DLE Membrane Materials Product and Services
- 10.2.4 EnergyX DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)
- 10.2.5 EnergyX Recent Developments/Updates
- 10.2.6 EnergyX Competitive Strengths & Weaknesses
- 10.3 Evove
  - 10.3.1 Evove Details
  - 10.3.2 Evove Major Business
  - 10.3.3 Evove DLE Membrane Materials Product and Services
  - 10.3.4 Evove DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 10.3.5 Evove Recent Developments/Updates
  - 10.3.6 Evove Competitive Strengths & Weaknesses
- 10.4 ElectraLith
  - 10.4.1 ElectraLith Details
  - 10.4.2 ElectraLith Major Business
  - 10.4.3 ElectraLith DLE Membrane Materials Product and Services
  - 10.4.4 ElectraLith DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 10.4.5 ElectraLith Recent Developments/Updates
  - 10.4.6 ElectraLith Competitive Strengths & Weaknesses
- 10.5 Saltworks Technologies
  - 10.5.1 Saltworks Technologies Details
  - 10.5.2 Saltworks Technologies Major Business
  - 10.5.3 Saltworks Technologies DLE Membrane Materials Product and Services
  - 10.5.4 Saltworks Technologies DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 10.5.5 Saltworks Technologies Recent Developments/Updates
  - 10.5.6 Saltworks Technologies Competitive Strengths & Weaknesses
- 10.6 Gradiant
  - 10.6.1 Gradiant Details
  - 10.6.2 Gradiant Major Business
  - 10.6.3 Gradiant DLE Membrane Materials Product and Services
  - 10.6.4 Gradiant DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 10.6.5 Gradiant Recent Developments/Updates
  - 10.6.6 Gradiant Competitive Strengths & Weaknesses

## 10.7 alkaLi

### 10.7.1 alkaLi Details

### 10.7.2 alkaLi Major Business

### 10.7.3 alkaLi DLE Membrane Materials Product and Services

### 10.7.4 alkaLi DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)

### 10.7.5 alkaLi Recent Developments/Updates

### 10.7.6 alkaLi Competitive Strengths & Weaknesses

## 10.8 Kovalus Separation Solutions

### 10.8.1 Kovalus Separation Solutions Details

### 10.8.2 Kovalus Separation Solutions Major Business

### 10.8.3 Kovalus Separation Solutions DLE Membrane Materials Product and Services

### 10.8.4 Kovalus Separation Solutions DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)

### 10.8.5 Kovalus Separation Solutions Recent Developments/Updates

### 10.8.6 Kovalus Separation Solutions Competitive Strengths & Weaknesses

## 10.9 LiqTech

### 10.9.1 LiqTech Details

### 10.9.2 LiqTech Major Business

### 10.9.3 LiqTech DLE Membrane Materials Product and Services

### 10.9.4 LiqTech DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)

### 10.9.5 LiqTech Recent Developments/Updates

### 10.9.6 LiqTech Competitive Strengths & Weaknesses

## 10.10 NORAM Electrolysis Systems

### 10.10.1 NORAM Electrolysis Systems Details

### 10.10.2 NORAM Electrolysis Systems Major Business

### 10.10.3 NORAM Electrolysis Systems DLE Membrane Materials Product and Services

### 10.10.4 NORAM Electrolysis Systems DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)

### 10.10.5 NORAM Electrolysis Systems Recent Developments/Updates

### 10.10.6 NORAM Electrolysis Systems Competitive Strengths & Weaknesses

## 10.11 De Nora

### 10.11.1 De Nora Details

### 10.11.2 De Nora Major Business

### 10.11.3 De Nora DLE Membrane Materials Product and Services

### 10.11.4 De Nora DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)

### 10.11.5 De Nora Recent Developments/Updates

- 10.11.6 De Nora Competitive Strengths & Weaknesses
- 10.12 Ionomr Innovations
  - 10.12.1 Ionomr Innovations Details
  - 10.12.2 Ionomr Innovations Major Business
  - 10.12.3 Ionomr Innovations DLE Membrane Materials Product and Services
  - 10.12.4 Ionomr Innovations DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 10.12.5 Ionomr Innovations Recent Developments/Updates
  - 10.12.6 Ionomr Innovations Competitive Strengths & Weaknesses
- 10.13 SLB
  - 10.13.1 SLB Details
  - 10.13.2 SLB Major Business
  - 10.13.3 SLB DLE Membrane Materials Product and Services
  - 10.13.4 SLB DLE Membrane Materials Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 10.13.5 SLB Recent Developments/Updates
  - 10.13.6 SLB Competitive Strengths & Weaknesses

## **11 INDUSTRY CHAIN ANALYSIS**

- 11.1 DLE Membrane Materials Industry Chain
- 11.2 DLE Membrane Materials Upstream Analysis
  - 11.2.1 DLE Membrane Materials Core Raw Materials
  - 11.2.2 Main Manufacturers of DLE Membrane Materials Core Raw Materials
- 11.3 Midstream Analysis
- 11.4 Downstream Analysis
- 11.5 DLE Membrane Materials Production Mode
- 11.6 DLE Membrane Materials Procurement Model
- 11.7 DLE Membrane Materials Industry Sales Model and Sales Channels
  - 11.7.1 DLE Membrane Materials Sales Model
  - 11.7.2 DLE Membrane Materials Typical Distributors

## **12 RESEARCH FINDINGS AND CONCLUSION**

## **13 APPENDIX**

- 13.1 Methodology
- 13.2 Research Process and Data Source
- 13.3 Disclaimer





## List Of Tables

### LIST OF TABLES

- Table 1. World DLE Membrane Materials Production Value by Region (2021, 2025 and 2032) & (USD Million)
- Table 2. World DLE Membrane Materials Production Value by Region (2021-2026) & (USD Million)
- Table 3. World DLE Membrane Materials Production Value by Region (2027-2032) & (USD Million)
- Table 4. World DLE Membrane Materials Production Value Market Share by Region (2021-2026)
- Table 5. World DLE Membrane Materials Production Value Market Share by Region (2027-2032)
- Table 6. World DLE Membrane Materials Production by Region (2021-2026) & (Sq m)
- Table 7. World DLE Membrane Materials Production by Region (2027-2032) & (Sq m)
- Table 8. World DLE Membrane Materials Production Market Share by Region (2021-2026)
- Table 9. World DLE Membrane Materials Production Market Share by Region (2027-2032)
- Table 10. World DLE Membrane Materials Average Price by Region (2021-2026) & (US\$/Sq m)
- Table 11. World DLE Membrane Materials Average Price by Region (2027-2032) & (US\$/Sq m)
- Table 12. DLE Membrane Materials Major Market Trends
- Table 13. World DLE Membrane Materials Consumption Growth Rate Forecast by Region (2021 & 2025 & 2032) & (Sq m)
- Table 14. World DLE Membrane Materials Consumption by Region (2021-2026) & (Sq m)
- Table 15. World DLE Membrane Materials Consumption Forecast by Region (2027-2032) & (Sq m)
- Table 16. World DLE Membrane Materials Production Value by Manufacturer (2021-2026) & (USD Million)
- Table 17. Production Value Market Share of Key DLE Membrane Materials Producers in 2025
- Table 18. World DLE Membrane Materials Production by Manufacturer (2021-2026) & (Sq m)
- Table 19. Production Market Share of Key DLE Membrane Materials Producers in 2025
- Table 20. World DLE Membrane Materials Average Price by Manufacturer (2021-2026)



& (US\$/Sq m)

Table 21. Global DLE Membrane Materials Company Evaluation Quadrant

Table 22. World DLE Membrane Materials Industry Rank of Major Manufacturers, Based on Production Value in 2025

Table 23. Head Office and DLE Membrane Materials Production Site of Key Manufacturer

Table 24. DLE Membrane Materials Market: Company Product Type Footprint

Table 25. DLE Membrane Materials Market: Company Product Application Footprint

Table 26. DLE Membrane Materials Competitive Factors

Table 27. DLE Membrane Materials New Entrant and Capacity Expansion Plans

Table 28. DLE Membrane Materials Mergers & Acquisitions Activity

Table 29. United States VS China DLE Membrane Materials Production Value Comparison, (2021 & 2025 & 2032) & (USD Million)

Table 30. United States VS China DLE Membrane Materials Production Comparison, (2021 & 2025 & 2032) & (Sq m)

Table 31. United States VS China DLE Membrane Materials Consumption Comparison, (2021 & 2025 & 2032) & (Sq m)

Table 32. United States Based DLE Membrane Materials Manufacturers, Headquarters and Production Site (States, Country)

Table 33. United States Based Manufacturers DLE Membrane Materials Production Value, (2021-2026) & (USD Million)

Table 34. United States Based Manufacturers DLE Membrane Materials Production Value Market Share (2021-2026)

Table 35. United States Based Manufacturers DLE Membrane Materials Production (2021-2026) & (Sq m)

Table 36. United States Based Manufacturers DLE Membrane Materials Production Market Share (2021-2026)

Table 37. China Based DLE Membrane Materials Manufacturers, Headquarters and Production Site (Province, Country)

Table 38. China Based Manufacturers DLE Membrane Materials Production Value, (2021-2026) & (USD Million)

Table 39. China Based Manufacturers DLE Membrane Materials Production Value Market Share (2021-2026)

Table 40. China Based Manufacturers DLE Membrane Materials Production, (2021-2026) & (Sq m)

Table 41. China Based Manufacturers DLE Membrane Materials Production Market Share (2021-2026)

Table 42. Rest of World Based DLE Membrane Materials Manufacturers, Headquarters and Production Site (State, Country)

Table 43. Rest of World Based Manufacturers DLE Membrane Materials Production Value, (2021-2026) & (USD Million)

Table 44. Rest of World Based Manufacturers DLE Membrane Materials Production Value Market Share (2021-2026)

Table 45. Rest of World Based Manufacturers DLE Membrane Materials Production, (2021-2026) & (Sq m)

Table 46. Rest of World Based Manufacturers DLE Membrane Materials Production Market Share (2021-2026)

Table 47. World DLE Membrane Materials Production Value by Type, (USD Million), 2021 & 2025 & 2032

Table 48. World DLE Membrane Materials Production by Type (2021-2026) & (Sq m)

Table 49. World DLE Membrane Materials Production by Type (2027-2032) & (Sq m)

Table 50. World DLE Membrane Materials Production Value by Type (2021-2026) & (USD Million)

Table 51. World DLE Membrane Materials Production Value by Type (2027-2032) & (USD Million)

Table 52. World DLE Membrane Materials Average Price by Type (2021-2026) & (US\$/Sq m)

Table 53. World DLE Membrane Materials Average Price by Type (2027-2032) & (US\$/Sq m)

Table 54. World DLE Membrane Materials Production Value by Membrane Material Structure, (USD Million), 2021 & 2025 & 2032

Table 55. World DLE Membrane Materials Production by Membrane Material Structure (2021-2026) & (Sq m)

Table 56. World DLE Membrane Materials Production by Membrane Material Structure (2027-2032) & (Sq m)

Table 57. World DLE Membrane Materials Production Value by Membrane Material Structure (2021-2026) & (USD Million)

Table 58. World DLE Membrane Materials Production Value by Membrane Material Structure (2027-2032) & (USD Million)

Table 59. World DLE Membrane Materials Average Price by Membrane Material Structure (2021-2026) & (US\$/Sq m)

Table 60. World DLE Membrane Materials Average Price by Membrane Material Structure (2027-2032) & (US\$/Sq m)

Table 61. World DLE Membrane Materials Production Value by Module Form, (USD Million), 2021 & 2025 & 2032

Table 62. World DLE Membrane Materials Production by Module Form (2021-2026) & (Sq m)

Table 63. World DLE Membrane Materials Production by Module Form (2027-2032) &

(Sq m)

Table 64. World DLE Membrane Materials Production Value by Module Form (2021-2026) & (USD Million)

Table 65. World DLE Membrane Materials Production Value by Module Form (2027-2032) & (USD Million)

Table 66. World DLE Membrane Materials Average Price by Module Form (2021-2026) & (US\$/Sq m)

Table 67. World DLE Membrane Materials Average Price by Module Form (2027-2032) & (US\$/Sq m)

Table 68. World DLE Membrane Materials Production Value by Process Position, (USD Million), 2021 & 2025 & 2032

Table 69. World DLE Membrane Materials Production by Process Position (2021-2026) & (Sq m)

Table 70. World DLE Membrane Materials Production by Process Position (2027-2032) & (Sq m)

Table 71. World DLE Membrane Materials Production Value by Process Position (2021-2026) & (USD Million)

Table 72. World DLE Membrane Materials Production Value by Process Position (2027-2032) & (USD Million)

Table 73. World DLE Membrane Materials Average Price by Process Position (2021-2026) & (US\$/Sq m)

Table 74. World DLE Membrane Materials Average Price by Process Position (2027-2032) & (US\$/Sq m)

Table 75. World DLE Membrane Materials Production Value by Application, (USD Million), 2021 & 2025 & 2032

Table 76. World DLE Membrane Materials Production by Application (2021-2026) & (Sq m)

Table 77. World DLE Membrane Materials Production by Application (2027-2032) & (Sq m)

Table 78. World DLE Membrane Materials Production Value by Application (2021-2026) & (USD Million)

Table 79. World DLE Membrane Materials Production Value by Application (2027-2032) & (USD Million)

Table 80. World DLE Membrane Materials Average Price by Application (2021-2026) & (US\$/Sq m)

Table 81. World DLE Membrane Materials Average Price by Application (2027-2032) & (US\$/Sq m)

Table 82. DuPont Basic Information, Manufacturing Base and Competitors

Table 83. DuPont Major Business

|                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Table 84. DuPont DLE Membrane Materials Product and Services                                                                                                                   |
| Table 85. DuPont DLE Membrane Materials Production (Sq m), Price (US\$/Sq m),<br>Production Value (USD Million), Gross Margin and Market Share (2021-2026)                     |
| Table 86. DuPont Recent Developments/Updates                                                                                                                                   |
| Table 87. DuPont Competitive Strengths & Weaknesses                                                                                                                            |
| Table 88. EnergyX Basic Information, Manufacturing Base and Competitors                                                                                                        |
| Table 89. EnergyX Major Business                                                                                                                                               |
| Table 90. EnergyX DLE Membrane Materials Product and Services                                                                                                                  |
| Table 91. EnergyX DLE Membrane Materials Production (Sq m), Price (US\$/Sq m),<br>Production Value (USD Million), Gross Margin and Market Share (2021-2026)                    |
| Table 92. EnergyX Recent Developments/Updates                                                                                                                                  |
| Table 93. EnergyX Competitive Strengths & Weaknesses                                                                                                                           |
| Table 94. Evove Basic Information, Manufacturing Base and Competitors                                                                                                          |
| Table 95. Evove Major Business                                                                                                                                                 |
| Table 96. Evove DLE Membrane Materials Product and Services                                                                                                                    |
| Table 97. Evove DLE Membrane Materials Production (Sq m), Price (US\$/Sq m),<br>Production Value (USD Million), Gross Margin and Market Share (2021-2026)                      |
| Table 98. Evove Recent Developments/Updates                                                                                                                                    |
| Table 99. Evove Competitive Strengths & Weaknesses                                                                                                                             |
| Table 100. ElectraLith Basic Information, Manufacturing Base and Competitors                                                                                                   |
| Table 101. ElectraLith Major Business                                                                                                                                          |
| Table 102. ElectraLith DLE Membrane Materials Product and Services                                                                                                             |
| Table 103. ElectraLith DLE Membrane Materials Production (Sq m), Price (US\$/Sq m),<br>Production Value (USD Million), Gross Margin and Market Share (2021-2026)               |
| Table 104. ElectraLith Recent Developments/Updates                                                                                                                             |
| Table 105. ElectraLith Competitive Strengths & Weaknesses                                                                                                                      |
| Table 106. Saltworks Technologies Basic Information, Manufacturing Base and<br>Competitors                                                                                     |
| Table 107. Saltworks Technologies Major Business                                                                                                                               |
| Table 108. Saltworks Technologies DLE Membrane Materials Product and Services                                                                                                  |
| Table 109. Saltworks Technologies DLE Membrane Materials Production (Sq m), Price<br>(US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share<br>(2021-2026) |
| Table 110. Saltworks Technologies Recent Developments/Updates                                                                                                                  |
| Table 111. Saltworks Technologies Competitive Strengths & Weaknesses                                                                                                           |
| Table 112. Gradient Basic Information, Manufacturing Base and Competitors                                                                                                      |
| Table 113. Gradient Major Business                                                                                                                                             |
| Table 114. Gradient DLE Membrane Materials Product and Services                                                                                                                |
| Table 115. Gradient DLE Membrane Materials Production (Sq m), Price (US\$/Sq m),                                                                                               |

Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 116. Gradient Recent Developments/Updates

Table 117. Gradient Competitive Strengths & Weaknesses

Table 118. alkaLi Basic Information, Manufacturing Base and Competitors

Table 119. alkaLi Major Business

Table 120. alkaLi DLE Membrane Materials Product and Services

Table 121. alkaLi DLE Membrane Materials Production (Sq m), Price (US\$/Sq m),  
Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 122. alkaLi Recent Developments/Updates

Table 123. alkaLi Competitive Strengths & Weaknesses

Table 124. Kovalus Separation Solutions Basic Information, Manufacturing Base and  
Competitors

Table 125. Kovalus Separation Solutions Major Business

Table 126. Kovalus Separation Solutions DLE Membrane Materials Product and  
Services

Table 127. Kovalus Separation Solutions DLE Membrane Materials Production (Sq m),  
Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share  
(2021-2026)

Table 128. Kovalus Separation Solutions Recent Developments/Updates

Table 129. Kovalus Separation Solutions Competitive Strengths & Weaknesses

Table 130. LiqTech Basic Information, Manufacturing Base and Competitors

Table 131. LiqTech Major Business

Table 132. LiqTech DLE Membrane Materials Product and Services

Table 133. LiqTech DLE Membrane Materials Production (Sq m), Price (US\$/Sq m),  
Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 134. LiqTech Recent Developments/Updates

Table 135. LiqTech Competitive Strengths & Weaknesses

Table 136. NORAM Electrolysis Systems Basic Information, Manufacturing Base and  
Competitors

Table 137. NORAM Electrolysis Systems Major Business

Table 138. NORAM Electrolysis Systems DLE Membrane Materials Product and  
Services

Table 139. NORAM Electrolysis Systems DLE Membrane Materials Production (Sq m),  
Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share  
(2021-2026)

Table 140. NORAM Electrolysis Systems Recent Developments/Updates

Table 141. NORAM Electrolysis Systems Competitive Strengths & Weaknesses

Table 142. De Nora Basic Information, Manufacturing Base and Competitors

Table 143. De Nora Major Business

Table 144. De Nora DLE Membrane Materials Product and Services

Table 145. De Nora DLE Membrane Materials Production (Sq m), Price (US\$/Sq m),  
Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 146. De Nora Recent Developments/Updates

Table 147. De Nora Competitive Strengths & Weaknesses

Table 148. Ionomr Innovations Basic Information, Manufacturing Base and Competitors

Table 149. Ionomr Innovations Major Business

Table 150. Ionomr Innovations DLE Membrane Materials Product and Services

Table 151. Ionomr Innovations DLE Membrane Materials Production (Sq m), Price  
(US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share  
(2021-2026)

Table 152. Ionomr Innovations Recent Developments/Updates

Table 153. Ionomr Innovations Competitive Strengths & Weaknesses

Table 154. SLB Basic Information, Manufacturing Base and Competitors

Table 155. SLB Major Business

Table 156. SLB DLE Membrane Materials Product and Services

Table 157. SLB DLE Membrane Materials Production (Sq m), Price (US\$/Sq m),  
Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 158. SLB Recent Developments/Updates

Table 159. SLB Competitive Strengths & Weaknesses

Table 160. Global Key Players of DLE Membrane Materials Upstream (Raw Materials)

Table 161. Global DLE Membrane Materials Typical Customers

Table 162. DLE Membrane Materials Typical Distributors



## List Of Figures

### LIST OF FIGURES

Figure 1. DLE Membrane Materials Picture

Figure 2. World DLE Membrane Materials Production Value: 2021 & 2025 & 2032, (USD Million)

Figure 3. World DLE Membrane Materials Production Value and Forecast (2021-2032) & (USD Million)

Figure 4. World DLE Membrane Materials Production (2021-2032) & (Sq m)

Figure 5. World DLE Membrane Materials Average Price (2021-2032) & (US\$/Sq m)

Figure 6. World DLE Membrane Materials Production Value Market Share by Region (2021-2032)

Figure 7. World DLE Membrane Materials Production Market Share by Region (2021-2032)

Figure 8. North America DLE Membrane Materials Production (2021-2032) & (Sq m)

Figure 9. Europe DLE Membrane Materials Production (2021-2032) & (Sq m)

Figure 10. DLE Membrane Materials Market Drivers

Figure 11. Factors Affecting Demand

Figure 12. World DLE Membrane Materials Consumption (2021-2032) & (Sq m)

Figure 13. World DLE Membrane Materials Consumption Market Share by Region (2021-2032)

Figure 14. United States DLE Membrane Materials Consumption (2021-2032) & (Sq m)

Figure 15. China DLE Membrane Materials Consumption (2021-2032) & (Sq m)

Figure 16. Europe DLE Membrane Materials Consumption (2021-2032) & (Sq m)

Figure 17. Japan DLE Membrane Materials Consumption (2021-2032) & (Sq m)

Figure 18. South Korea DLE Membrane Materials Consumption (2021-2032) & (Sq m)

Figure 19. ASEAN DLE Membrane Materials Consumption (2021-2032) & (Sq m)

Figure 20. India DLE Membrane Materials Consumption (2021-2032) & (Sq m)

Figure 21. Producer Shipments of DLE Membrane Materials by Manufacturer Revenue (\$MM) and Market Share (%): 2025

Figure 22. Global Four-firm Concentration Ratios (CR4) for DLE Membrane Materials Markets in 2025

Figure 23. Global Four-firm Concentration Ratios (CR8) for DLE Membrane Materials Markets in 2025

Figure 24. United States VS China: DLE Membrane Materials Production Value Market Share Comparison (2021 & 2025 & 2032)

Figure 25. United States VS China: DLE Membrane Materials Production Market Share Comparison (2021 & 2025 & 2032)

Figure 26. United States VS China: DLE Membrane Materials Consumption Market Share Comparison (2021 & 2025 & 2032)

Figure 27. United States Based Manufacturers DLE Membrane Materials Production Market Share 2025

Figure 28. China Based Manufacturers DLE Membrane Materials Production Market Share 2025

Figure 29. Rest of World Based Manufacturers DLE Membrane Materials Production Market Share 2025

Figure 30. World DLE Membrane Materials Production Value by Type, (USD Million), 2021 & 2025 & 2032

Figure 31. World DLE Membrane Materials Production Value Market Share by Type in 2025

Figure 32. Lithium-Selective Membrane

Figure 33. Monovalent-Selective Ion-Exchange Membrane

Figure 34. Nanofiltration Membrane

Figure 35. Reverse Osmosis Concentration Membrane

Figure 36. Electrochemical Membrane

Figure 37. Pretreatment Ceramic Membrane

Figure 38. Other

Figure 39. Other

Figure 40. World DLE Membrane Materials Production Market Share by Type (2021-2032)

Figure 41. World DLE Membrane Materials Production Value Market Share by Type (2021-2032)

Figure 42. World DLE Membrane Materials Average Price by Type (2021-2032) & (US\$/Sq m)

Figure 43. World DLE Membrane Materials Production Value by Membrane Material Structure, (USD Million), 2021 & 2025 & 2032

Figure 44. World DLE Membrane Materials Production Value Market Share by Membrane Material Structure in 2025

Figure 45. Polyamide Thin-Film Composite

Figure 46. Ion-Exchange Polymer

Figure 47. Bipolar Membrane

Figure 48. Inorganic Ceramic Composite

Figure 49. Nanochannel Composite

Figure 50. Coated Commercial Membrane

Figure 51. Other

Figure 52. Other

Figure 53. World DLE Membrane Materials Production Market Share by Membrane



## Material Structure (2021-2032)

Figure 54. World DLE Membrane Materials Production Value Market Share by Membrane Material Structure (2021-2032)

Figure 55. World DLE Membrane Materials Average Price by Membrane Material Structure (2021-2032) & (US\$/Sq m)

Figure 56. World DLE Membrane Materials Production Value by Module Form, (USD Million), 2021 & 2025 & 2032

Figure 57. World DLE Membrane Materials Production Value Market Share by Module Form in 2025

Figure 58. Spiral-Wound Element

Figure 59. Flat-Sheet Stack

Figure 60. Plate-Frame Module

Figure 61. Hollow-Fiber Module

Figure 62. Tubular Ceramic Module

Figure 63. Custom Membrane Stack

Figure 64. Other

Figure 65. Other

Figure 66. World DLE Membrane Materials Production Market Share by Module Form (2021-2032)

Figure 67. World DLE Membrane Materials Production Value Market Share by Module Form (2021-2032)

Figure 68. World DLE Membrane Materials Average Price by Module Form (2021-2032) & (US\$/Sq m)

Figure 69. World DLE Membrane Materials Production Value by Process Position, (USD Million), 2021 & 2025 & 2032

Figure 70. World DLE Membrane Materials Production Value Market Share by Process Position in 2025

Figure 71. Primary Lithium Capture

Figure 72. Mg-Li Separation

Figure 73. Brine Concentration

Figure 74. Fouling Pretreatment

Figure 75. Electrolytic Conversion

Figure 76. Water Recovery

Figure 77. Other

Figure 78. Other

Figure 79. World DLE Membrane Materials Production Market Share by Process Position (2021-2032)

Figure 80. World DLE Membrane Materials Production Value Market Share by Process Position (2021-2032)

Figure 81. World DLE Membrane Materials Average Price by Process Position (2021-2032) & (US\$/Sq m)

Figure 82. World DLE Membrane Materials Production Value by Application, (USD Million), 2021 & 2025 & 2032

Figure 83. World DLE Membrane Materials Production Value Market Share by Application in 2025

Figure 84. Salt-Lake Brine DLE

Figure 85. Geothermal Brine DLE

Figure 86. Oilfield Produced-Water Lithium Recovery

Figure 87. Clay Leachate Lithium Purification

Figure 88. DLE Pilot and Demonstration Plants

Figure 89. Battery-Grade Lithium Hydroxide Refining

Figure 90. Brine Pretreatment for DLE

Figure 91. World DLE Membrane Materials Production Market Share by Application (2021-2032)

Figure 92. World DLE Membrane Materials Production Value Market Share by Application (2021-2032)

Figure 93. World DLE Membrane Materials Average Price by Application (2021-2032) & (US\$/Sq m)

Figure 94. DLE Membrane Materials Industry Chain

Figure 95. DLE Membrane Materials Procurement Model

Figure 96. DLE Membrane Materials Sales Model

Figure 97. DLE Membrane Materials Sales Channels, Direct Sales, and Distribution

Figure 98. Methodology

Figure 99. Research Process and Data Source

## I would like to order

Product name: Global DLE Membrane Materials Supply, Demand and Key Producers, 2026-2032

Product link: <https://marketpublishers.com/r/G57D88CE0388EN.html>

Price: US\$ 4,480.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G57D88CE0388EN.html>