

Medical-grade TPU Films Market Size, Share & Trends Analysis Report By Polymer Type (Polyether TPU Films, Polyester TPU Films), By Application (Medical Equipment, Biomedical Products, Wound Dressing), By Region, And Segment Forecasts, 2025 - 2030

<https://marketpublishers.com/r/MC447F808F45EN.html>

Date: April 2025

Pages: 120

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

ID: MC447F808F45EN

Abstracts

This report can be delivered to the clients within 3 Business days

Medical-grade TPU Films Market Growth & Trends

The global medical-grade TPU films market size is anticipated to reach USD 339.8 million by 2030 and is projected to grow at a CAGR of 5.5% from 2025 to 2030, according to a new report by Grand View Research, Inc. Medical-grade thermoplastic polyurethane (TPU) films have seen significant market growth due to their exceptional properties including biocompatibility, flexibility, transparency, and resistance to abrasion. The healthcare industry increasingly relies on these materials for applications ranging from wound dressings and surgical drapes to implantable devices and medical packaging. Key manufacturers such as Covestro AG, The Lubrizol Corporation, and Avient Corporation have expanded their medical-grade TPU product lines to meet this growing demand.

The aging global population and rise in chronic diseases have increased the need for advanced medical devices and equipment that utilize TPU films. For example, the growing prevalence of diabetes has driven demand for insulin delivery systems with TPU components, while cardiovascular conditions have boosted requirements for TPU-based catheter tubes, valve diaphragms, and other interventional devices. In addition, the COVID-19 pandemic highlighted the importance of medical-grade materials for PPE manufacturing, further accelerating market growth.

Technological advancements in TPU film manufacturing have created new opportunities, particularly in the realm of wearable healthcare devices and drug delivery systems. Innovations in additive manufacturing have also enabled custom TPU solutions for personalized medicine applications, such as 3D-printed anatomical models and surgical planning tools.

Environmental and regulatory considerations are reshaping the market landscape as well. Medical device manufacturers increasingly seek TPU films that comply with strict regulations like EU MDR, FDA requirements, and ISO 10993 biocompatibility standards. Simultaneously, sustainability concerns have driven the development of bio-based TPU alternatives derived from renewable resources rather than petroleum-based feedstocks.

Medical-grade TPU Films Market Report Highlights

The polyether TPU films segment led the market with the largest revenue share of 45.92% in 2024. The polyester TPU films segment is expected to grow at the fastest CAGR of 6.1% during the forecast period.

Based on application, the medical equipment segment led the market with the largest revenue share of 41.48% in 2024. The wound dressing segment is projected to grow at the fastest CAGR of 6.4% over the forecast period.

Asia Pacific dominated the market with the largest revenue share of 41.90% in 2024 and is anticipated to grow at the fastest CAGR of 6.2% during the forecast period.

In November 2024, Henkel, Covestro, and Quad Industries announced a strategic partnership to advance medical wearables using printed electronics, focusing on stretchable materials for healthcare applications. This collaboration combines Henkel's expertise in functional inks, Covestro's medical-grade Platilon TPU substrates, and Quad Industries' capabilities in customized design and manufacturing to accelerate the development of innovative wearable devices.

Contents

CHAPTER 1. METHODOLOGY AND SCOPE

- 1.1. Research Methodology
 - 1.1.1. Market Segmentation
 - 1.1.2. Market Definition
- 1.2. Research Scope & Assumptions
- 1.3. Information Procurement
 - 1.3.1. Purchased Database
 - 1.3.2. GVR's Internal Database
 - 1.3.3. Secondary Sources & Third-Party Perspectives
 - 1.3.4. Primary Research
- 1.4. Information Analysis
 - 1.4.1. Data Analysis Models
- 1.5. Market Formulation & Data Visualization
- 1.6. Data Validation & Publishing
- 1.7. List of Abbreviations

CHAPTER 2. EXECUTIVE SUMMARY

- 2.1. Market Snapshot, 2024 (USD Million)
- 2.2. Segmental Snapshot
- 2.3. Competitive Landscape Snapshot

CHAPTER 3. GLOBAL MEDICAL-GRADE TPU FILMS MARKET VARIABLES, TRENDS, AND SCOPE

- 3.1. Market Lineage Outlook
 - 3.1.1. Parent Market Outlook
- 3.2. Penetration & Growth Prospect Mapping
- 3.3. Industry Value Chain Analysis
 - 3.3.1. Profit Margin Analysis of Key Value Chain Participants
 - 3.3.2. Raw Material Trends
 - 3.3.3. Raw Material Price Analysis
- 3.4. Technology Overview
 - 3.4.1. Commercial Production Technology
 - 3.4.2. Roadmap of Technology Advancement, 2018 to 2030
- 3.5. Sustainability Trends

- 3.5.1. Recycling and Circular Economy
- 3.6. Regulatory Framework
 - 3.6.1. Policies and Incentive Plans
 - 3.6.2. Standards and Compliances
 - 3.6.3. Regulatory Impact Analysis
- 3.7. Average Price Trend Analysis, 2018 to 2030 (USD/kg)
 - 3.7.1. Key Factors Influencing Pricing
- 3.8. Supply Demand Gap Analysis
- 3.9. Market Dynamics
 - 3.9.1. Market Driver Analysis
 - 3.9.2. Market Restraint Analysis
 - 3.9.3. Industry Challenges
- 3.10. Porter's Five Forces Analysis
 - 3.10.1. Supplier Power
 - 3.10.2. Buyer Power
 - 3.10.3. Substitution Threat
 - 3.10.4. Threat from New Entrant
 - 3.10.5. Competitive Rivalry
- 3.11. PESTEL Analysis
 - 3.11.1. Political Landscape
 - 3.11.2. Economic Landscape
 - 3.11.3. Social Landscape
 - 3.11.4. Technological Landscape
 - 3.11.5. Environmental Landscape
 - 3.11.6. Legal Landscape

CHAPTER 4. GLOBAL MEDICAL-GRADE TPU FILMS MARKET: PRODUCT TYPE ESTIMATES & TREND ANALYSIS

- 4.1. Key Takeaways
- 4.2. Product Type Movement Analysis & Market Share, 2024 & 2030
 - 4.2.1. Polyether TPU Films
 - 4.2.1.1. Market estimates and forecasts, 2018 - 2030 (USD Million) (Tons)
 - 4.2.2. Polyester TPU Films
 - 4.2.2.1. Market estimates and forecasts, 2018 - 2030 (USD Million) (Tons)
 - 4.2.3. Others
 - 4.2.3.1. Market estimates and forecasts, 2018 - 2030 (USD Million) (Tons)

CHAPTER 5. GLOBAL MEDICAL-GRADE TPU FILMS MARKET: APPLICATION

ESTIMATES & TREND ANALYSIS

5.1. Key Takeaways

5.2. Application Movement Analysis & Market Share, 2024 & 2030

5.2.1. Medical Equipment

5.2.1.1. Market estimates and forecasts, 2018 - 2030 (USD Million) (Tons)

5.2.2. Biomedical Products

5.2.2.1. Market estimates and forecasts, 2018 - 2030 (USD Million) (Tons)

5.2.3. Protective Suits

5.2.3.1. Market estimates and forecasts, 2018 - 2030 (USD Million) (Tons)

5.2.4. Wound Dressing

5.2.4.1. Market estimates and forecasts, 2018 - 2030 (USD Million) (Tons)

5.2.5. Others

5.2.5.1. Market estimates and forecasts, 2018 - 2030 (USD Million) (Tons)

CHAPTER 6. GLOBAL MEDICAL-GRADE TPU FILMS MARKET: REGION ESTIMATES & TREND ANALYSIS

6.1. Key Takeaways

6.2. Regional Movement Analysis & Market Share, 2024 & 2030

6.3. North America

6.3.1. North America Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

6.3.2. U.S.

6.3.2.1. U.S. Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

6.3.3. Canada

6.3.3.1. Canada Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

6.3.4. Mexico

6.3.4.1. Mexico Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

6.4. Europe

6.4.1. Europe Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

6.4.2. Germany

6.4.2.1. Germany Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

6.4.3. UK

6.4.3.1. UK Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030
(USD Million) (Tons)

6.4.4. France

6.4.4.1. France Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030
(USD Million) (Tons)

6.4.5. Italy

6.4.5.1. Italy Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030
(USD Million) (Tons)

6.4.6. Spain

6.4.6.1. Spain Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030
(USD Million) (Tons)

6.5. Asia Pacific

6.5.1. Asia Pacific Medical-grade TPU Films Market Estimates & Forecasts, 2018 -
2030 (USD Million) (Tons)

6.5.2. China

6.5.2.1. China Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030
(USD Million) (Tons)

6.5.3. India

6.5.3.1. India Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030
(USD Million) (Tons)

6.5.4. Japan

6.5.4.1. Japan Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030
(USD Million) (Tons)

6.5.5. Australia

6.5.5.1. Australia Medical-grade TPU Films Market Estimates & Forecasts, 2018 -
2030 (USD Million) (Tons)

6.5.6. South Korea

6.5.6.1. South Korea Medical-grade TPU Films Market Estimates & Forecasts, 2018 -
2030 (USD Million) (Tons)

6.6. Central & South America

6.6.1. Central & South America Medical-grade TPU Films Market Estimates &
Forecasts, 2018 - 2030 (USD Million) (Tons)

6.6.2. Brazil

6.6.2.1. Brazil Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030
(USD Million) (Tons)

6.6.3. Argentina

6.6.3.1. Argentina Medical-grade TPU Films Market Estimates & Forecasts, 2018 -
2030 (USD Million) (Tons)

6.7. Middle East & Africa

6.7.1. Middle East & Africa Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

6.7.2. Saudi Arabia

6.7.2.1. Saudi Arabia Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

6.7.3. UAE

6.7.3.1. UAE Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

6.7.4. South Africa

6.7.4.1. South Africa Medical-grade TPU Films Market Estimates & Forecasts, 2018 - 2030 (USD Million) (Tons)

CHAPTER 7. COMPETITIVE LANDSCAPE

7.1. Key Global Players & Recent Developments & Their Impact on the Industry

7.2. Company/Competition Categorization

7.3. Vendor Landscape

7.3.1. List of Raw Material Suppliers and Key Value Chain Partners

7.3.2. List of Potential Customers

7.4. Company Market Position Analysis

7.5. Company Heat Map Analysis

7.6. Company Dashboard Analysis

7.7. Strategy Mapping

7.7.1. Expansions

7.7.2. Mergers & Acquisitions

7.7.3. Collaborations/Partnerships/Agreements

7.7.4. New Product Launches

7.7.5. Others

CHAPTER 8. COMPANY LISTING (OVERVIEW, FINANCIAL PERFORMANCE, PRODUCTS OVERVIEW)

8.1. Permal Gloucester Ltd.

8.1.1. Company Overview

8.1.2. Financial Performance

8.1.3. Product Benchmarking

8.2. The Lubrizol Corporation

8.3. Singhal Industries Pvt. Ltd.

8.4. Covestro AG

- 8.5. Zhongshan Breathtex Speciality Material Co.,Ltd.
- 8.6. Prochase Enterprise Co., Ltd.
- 8.7. UFP Technologies, Inc.
- 8.8. ARGOTEC
- 8.9. Wiman Corporation
- 8.10. AMERICAN POLYFILM, INC.
- 8.11. Avient Corporation

I would like to order

Product name: Medical-grade TPU Films Market Size, Share & Trends Analysis Report By Polymer Type (Polyether TPU Films, Polyester TPU Films), By Application (Medical Equipment, Biomedical Products, Wound Dressing), By Region, And Segment Forecasts, 2025 - 2030

Product link: <https://marketpublishers.com/r/MC447F808F45EN.html>

Price: US\$ 4,950.00 (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/MC447F808F45EN.html>