

# Worldwide Medical Polymer Markets: 2016-2025

https://marketpublishers.com/r/WB164B5C092EN.html

Date: March 2016

Pages: 0

Price: US\$ 3,995.00 (Single User License)

ID: WB164B5C092EN

## **Abstracts**

n-tech believes that medical polymers continue to represent a major opportunity for the polymer industry at the present time, driven by the aging of the population in developed nations and the accelerating use of polymer implants.

This report identifies the market opportunities in the space and provides guidance on the technical and regulatory framework in which these opportunities are emerging. It includes an analytical review of polymers used for medical applications, including developing implants, diagnostic systems, and hospital labware. The report also contains roadmap that will provide the reader with a guide to where medical polymers are headed technologically.

As with all n-tech reports, this report includes a granular ten-year forecast, profiles the activities of key suppliers and analyzes the evolving supply chain for medical polymers. For the firms covered we discuss their strategies and needs along with their strengths and weaknesses. In addition, the report provides an analysis of the market for medical polymers in various important country-specific markets.



## **Contents**

### **EXECUTIVE SUMMARY**

- E.1 Drivers for the use of Polymers in the Medical Device Market
- E.1.1 Medical Polymers at the Root of Technology Advances
- E.1.2 Low Cost Driving the Use of Medical Polymers
- E.1.3 Medical Polymers can Offer High Performance
- E.2 Market Opportunities for Medical Polymers
- E.2.1 Expecting New Revenues from Emerging Markets
- E.2.2 U.S. Market Continues to Grow
- E.2.3 Impact of Worldwide Trends
- E.3 Opportunities for the Plastics Industry
- E.3.1 Products: Polymers for Implants
- E.3.2 Products: Polymers for Labware
- E.4 Firms and Strategies to Watch in the Medical Polymer Market
- E.4.1 Covestro
- E.4.2 Celanese/Ticona
- E.4.4 Dow Chemical
- E.4.5 Dow Corning
- **E.4.5 DSM**
- E.4.6 DuPont
- E.4.7 Eastman Chemical
- E.4.8 Evonik
- E.4.9 Solvay
- E.4.10 Kraton Performance Polymers
- E.4.11 Lubrizol Life Sciences
- E.4.12 Victrex
- E.4.13 Juvora
- E.4.14 Shandong Weigao Group Medical Polymer Co
- E.5 Summary of Eight-Year Forecasts of the Medical Polymer Market

#### **CHAPTER ONE: INTRODUCTION**

- 1.1 Background to this Report
  - 1.1.1 Resins and Fibers
  - 1.1.2 Boom in Thermoplastic Elastomers (TPEs) and Engineered Plastics (EPs)
  - 1.1.3 Growing Demand for Biodegradable Plastics
  - 1.1.4 Ongoing Manufacturing Issues



- 1.2 Scope and Objectives of this Report
- 1.3 Methodology and Information Sources
- 1.4 Plan of this Report

#### **CHAPTER TWO: COMMERCIAL TRENDS IN MEDICAL POLYMERS**

- 2.1 Generic Advantages and Disadvantages of Polymers for Medical Applications
  - 2.1.1 Medical Applications: The Advantages of Polymers
  - 2.1.2 Disadvantages of Medical Polymers
  - 2.1.3 Replacement of Metals by Medical Polymers
- 2.2 Thermoplastics (PMMA, PLA, PGA, PP, PEEK, Polycarbonates)
  - 2.2.1 Medical Thermoplastics
  - 2.2.2 Current Supply Structures for Medical Thermoplastics
- 2.3 Medical Applications for Polyethylene (PE)
  - 2.3.1 Uses for PE in Medical Applications
  - 2.3.2 Current Supply Structure for Medical PE
- 2.4 Polystyrene (PS) in Medical Applications
  - 2.4.1 Styrene Copolymers
  - 2.4.2 Polystyrene and Styrenics: Medical Applications
  - 2.4.3 Supply Structure for Medical PS for Medical Applications
- 2.5 Medical PVC
  - 2.5.1 Medical Applications for PVC
- 2.6 Medical Nylon
  - 2.6.1 Uses of Nylon in Medical Applications
  - 2.6.2 Supply Structure for Nylon for Medical Applications
- 2.7 Other Polymers for Medical Applications
  - 2.7.1 Polyurethanes (PUs)
  - 2.7.2 Polytetrafluoroethylene (PTFE)
- 2.8 The Growing Role of Bioplastics in Medical Applications
  - 2.8.1 PLA
  - 2.8.2 Notable Trends in Medical Bioplastics
- 2.9 Key Points from this Chapter

#### CHAPTER THREE: APPLICATIONS FOR MEDICAL POLYMERS

- 3.1 Pricing and Forecast Assumptions
  - 3.1.1 Trends in Polymer Pricing
  - 3.1.2 Use of Medical Polymers in Different Applications
- 3.2 Opportunities for Medical Polymers in Medical Devices and Implants



- 3.2.1 Future Use of Polymers in Medical Applications
- 3.2.2 Medical Polymers in Orthopedic Implants and Regenerative Medicine Trident Polyethylene Bearings
- 3.2.3 Plastics for Contact Lenses and Lens Implants
- 3.2.4 Medical Polymers for Implantable Defibrillators and Related Devices
- 3.2.5 Breast Implants
- 3.2.6 Conductive Polymer Neural Implants
- 3.2.7 Markets for Medical Polymers in Blood Filters
- 3.2.8 Other Medical Devices Using Polymers
- 3.3 Eight-Year Forecast of Polymers in Implants by Polymer and Implant Type
- 3.4 Eight-Year Forecast of Polymers in Non-Implantable Devices by Polymer and Device Type
  - 3.4.1 Diagnostic Systems
- 3.5 Eight-Year Forecast of Polymers in Diagnostic Systems by Polymer and Device Type
  - 3.5.1 Laboratory and Surgical Accessories and Disposables
  - 3.5.2 Surgical Screws, Nails and Plates
  - 3.5.3 Catheters and Tubing
  - 3.5.4 Surgical Gloves
  - 3.5.5 Sutures and Shunts
- 3.6 Eight-Year Forecast of Polymers in Diagnostic Systems by Polymer and Device Type
- 3.7 Summary of Forecasts of Medical Polymers
  - 3.7.1 Summary Forecast of Medical Polymers by Application
- 3.8 Summary Forecast of Medical Polymers by Polymer Type
- 3.9 Key Points in this Chapter

#### CHAPTER FOUR: NATIONAL MARKETS AND REGULATORY FACTORS

- 4.1 Generic Policy Issues Raised by Polymer Medical Devices
  - 4.1.1 Safety Issues Related to Polymer Devices
- 4.1.2 Problems of Waste Disposal and Management in Medical Polymer Manufacturing
  - 4.1.3 Healthcare Issues and an Aging Population
  - 4.1.4 Geographical Distribution of the Markets
- 4.2 The Medical Polymer Market in the United States
  - 4.2.1 Medical Polymers and the Biomaterials Access Assurance Act of 1998
  - 4.2.2 Impact of "Obamacare"
  - 4.2.3 Role and Impact of the FDA



- 4.2.4 Analysis of the Market for Medical Polymers in the U.S.
- 4.2.5 Eight-Year Forecasts for Medical Polymers in the U.S.
- 4.3 The Medical Polymer Market in Europe
- 4.3.1 Role and Impact of the European Commission and Other Regulatory Authorities in the European Union
- 4.3.2 National Regulations and Regulatory Agencies Impacting Medical Polymer Markets in the EU
  - 4.3.3 Analysis of the Market for Medical Polymers in Europe
- 4.3.4 Eight-Year Forecast for Medical Polymers in Europe
- 4.4 The Medical Polymer Market in Japan
  - 4.4.1 National Laws and Regulations Impacting the Medical Polymer Market in Japan
  - 4.4.2 Analysis of Market for Medical Polymers in Japan
- 4.4.3 Eight-Year Forecast for Medical Polymers in Japan
- 4.5 The Medical Polymer Market in China
  - 4.5.1 National Laws and Regulations Impacting the Medical Polymer Market in China
  - 4.5.2 Impact of Chinese Industrial Policy on the Medical Polymer Market
- 4.5.3 Analysis of the Market for Medical Polymers in China
- 4.5.4 Eight-Year Forecast for Medical Polymers in China
- 4.6 The Medical Polymer Market in India
- 4.6.1 National Laws and Regulations Impacting the Medical Polymer Market in India
- 4.6.2 Analysis of the Market for Medical Polymers in India
- 4.6.3 Eight-Year Forecast for Medical Polymers in India
- 4.7 Other Notable National Markets for Medical Polymers
- 4.7.1 The Medical Polymer Market in Canada
- 4.7.2 The Medical Polymer Market in Australia
- 4.7.3 The Medical Polymer Market in South Korea
- 4.8 Summary of Eight-Year Forecasts of Medical Polymers by Country

#### ACRONYMS AND ABBREVIATIONS USED IN THIS REPORT



## **About**

**ABOUT THE AUTHOR** 



## **List Of Exhibits**

#### LIST OF EXHIBITS

Evilatilati E. A. Jasana		of Dalimanana	and Thenin Commonst	Λ .ss l: 4:s -
Exhibit E-1: Impo	rtant Advantages	s of Polymers a	ina Their Current	Applications

- Exhibit E-2: Summary Forecast by Top-10 Polymer Types (U.S.\$ Millions)
- Exhibit 2-1: Medical Polymers and their Applications
- Exhibit 2-3: Thermoplastics Properties and Uses
- Exhibit 2-4: Selected Suppliers of Thermoplastics
- Exhibit 2-5: Opportunities for Different PE Grades
- Exhibit 2-6: Selected Suppliers of Polyethylene Products and their Features
- Exhibit 2-7: Requirements and Medical Applications for Selected Types of PS
- Exhibit 2-8: Suppliers of GPPS, HIPS, and SPS Products for Medical Applications and their Trade Names
- Exhibit 2-9: Nylon Products and Manufacturers
- Exhibit 2-10: Selected Medical Devices and Implants Made from Polyurethanes
- Exhibit 2-11: Leading Teflon products, Their Manufacturers, and Application Areas
- Exhibit: 3-1: Pricing of Polymers and Polymer-Based Medical Products
- Exhibit: 3-2: Approximate Market Share of Different Polymer Types in Each Application
- Exhibit 3-3: Selected Polymeric Orthopedic Products, their Manufacturers and Opportunities
- Exhibit 3-4: Approved Breast Implants and their Market Opportunities
- Exhibit 3-5: Overview of Polymer Use in Important Blood Filters
- Exhibit 3-6: Overview of Selected Wound Dressing Materials
- Exhibit: 3-7 Orthopedic Implants and Regenerative Medicines Forecast
- Exhibit 3-8: Forecast of Polymer Use In Lens Implants
- Exhibit 3-9: Forecast of Polymer Use in Contact Lenses
- Exhibit 3-10: Forecast of Polymer Use in Implantable Defibrillators
- Exhibit 3-12: Forecast of Conductive Polymer Use In Neural Implants
- Exhibit 3-13: Forecast of Polymer Use In Blood Filters
- Exhibit 3-15: Polymers Used in Diagnostic Devices and Their Future Opportunities
- Exhibit 3-16: Forecast of Polymer Use In Diagnostic Devices
- Exhibit 3-17: Forecast of Polymer Use In Automated Analyzers
- Exhibit 3-18: Forecast of Polymer Use In Homecare Diagnostic Devices
- Exhibit 3-19: Forecast of Polymer Use In Point-of-Care (POC) Diagnostics
- Exhibit 3-20: Overview of Important Polymers for Multiple-Use and Disposable Labware Fabrication
- Exhibit 3-21: Leading Labware Manufacturers and Their Brands and Market Potential
- Exhibit 3-22: Selected Catheter and Tubing Products



- Exhibit 3-23: Surgical Gloves and Their Specifications
- Exhibit 3-24: Forecast of Polymer Use In Surgical Screws, Nails and Plates
- Exhibit 3-25: Forecast of Polymer Use In Catheters and Tubing
- Exhibit 3-26: Forecast of Polymer Use In Surgical Gloves
- Exhibit 3-27: Forecast of Polymer Use In Sutures and Shunts
- Exhibit 3-29: Summary Forecast by Top-10 Polymer Types (U.S\$ Millions)
- Exhibit 4-1: Key Industry Issues, Their Impacts, and Probable Solutions
- Exhibit 4-2: Important U.S. Regulations Affecting Medical Polymers
- Exhibit 4-3: Key Players in the U.S. Medical Polymer Industry Responding to Major Trends
- Exhibit 4-4: Eight-Year Forecast of Medical Polymers in the U.S. (US\$ Millions) 40% of the Global Market
- Exhibit 4-5: Key EC Regulations and Their Significance
- Exhibit 4-6: Recent Technology Developments in Europe
- Exhibit 4-7: Eight-Year Forecast for Medical Polymers in Europe (US\$ Millions) 25% of the Global Market
- Exhibit 4-8: Important Regulations in Japan and Their Impact on the Medical Polymers Market
- Exhibit 4-9: Recent Technology Developments in Japan
- Exhibit 4-10: Eight-Year Forecast for Medical Polymers in Japan (US\$ Millions) 12% of the Global Market
- Exhibit 4-11: Key Impacts of CFDA Policies and Opportunities for Policy Improvement in China
- Exhibit 4-12: Recent Technology Developments in China
- Exhibit 4-13: Eight-Year Forecast for Medical Polymers in China (US\$Millions)
- Exhibit 4-14: Key Regulatory Impacts and Opportunities for Policy Improvement in India
- Exhibit 4-15: Recent Technology Developments in India
- Exhibit 4-16: Regulatory Scenario and Industry Opportunities in Other Markets
- Exhibit 4-17: Global Eight-Year Forecast for Medical Polymers Broken Out by
- Country/Region



#### I would like to order

Product name: Worldwide Medical Polymer Markets: 2016-2025

Product link: https://marketpublishers.com/r/WB164B5C092EN.html

Price: US\$ 3,995.00 (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 <a href="https://marketpublishers.com/r/WB164B5C092EN.html">https://marketpublishers.com/r/WB164B5C092EN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:		
Last name:		
Email:		
Company:		
Address:		
City:		
Zip code:		
Country:		
Tel:		
Fax:		
Your message:		
	**All fields are required	
	Custumer signature	

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970