



**Global and China Ultra High Molecular
Weight Polyethylene (UHMWPE) Industry
Report, 2017-2021**

Oct. 2017

STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- ◆ To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- ◆ To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- ◆ To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

Ultra High Molecular Weight Polyethylene (UHMWPE), a kind of linear polyethylene with relative molecular weight of above 1.5 million and an engineering thermoplastic with excellent comprehensive properties, can be processed into products like sheets, pipes, fibers and films. It is primarily used in high-end fields, such as body armor, bulletproof helmet, bulletproof armor, anti-cutting gloves and aerospace, marine equipment, rail transit, medical stents and lithium-battery separator.

Global UHMWPE resin capacity and demand were 221kt and 200kt in 2016, respectively. As manufacturing has increasingly higher requirements on material properties, UHMWPE resin enjoys broad market prospects because of its excellent properties, finding output and demand as estimated 380kt and 367kt in 2021 separately.

UHMWPE fiber, a fiber spun out of UHMWPE, is a key strategic and high-tech material and one of three high-performance fibers, and has been in a state of short supply. Global demand for UHMWPE fiber was about 60kt in 2016, compared with an output of only 30kt or so. As more military and civilian products (like high-strength light cables) are developed, the demand for UHMWPE fiber is expected to maintain a growth rate of around 15% over the next five years, reaching 108.7kt in 2021 but still in short supply.

Meanwhile, the demand far exceeds the supply in the Chinese market. About 20kt of UHMWPE fiber was needed in the country in 2016, while the output was roughly 9kt. Restricted by lack of production technologies for spinning-grade specialty resins and weaker spinning technology and outdated production facilities than that in the developed countries, local Chinese enterprises produce mainly mid and low-end products, while high-end ones are monopolized by foreign players with core technologies including Dutch DSM, U.S. Honeywell and Japanese Mitsui Chemicals. DSM produces the most in the world.

Major global UHMWPE resin makers include CELANESE, Braskem, DSM and Mitsui Chemicals. CELANESE has the world's largest UHMWPE products capacity with production bases in Oberhausen (Germany), Bishop, Texas (U.S.) and Nanjing (China) with capacity totaling about 108kt/a, followed by Braskem with capacity of approximately 45kt/a.

Key local Chinese resin producers are Henan Wosen Ultra-high Chemical Industry Science and Technology, Shanghai Lianle Chemical Industry Science and Technology, Anhui Tejjajin Fine Chemicals, Jiujiang Zhongke Xinxing New Materials and Sinopec Qilu Petrochemical Company with a combined capacity of about 80kt/a (including Celanese's Nanjing-based plant), indicating a highly concentrated market but mainly for mid and low-end products due to technological limitations. Driven by rapid growth in demand from the downstream sectors of UHMWPE resin in recent years, companies have kept expanding capacity to scramble for market share. Jiujiang Zhongke Xinxing New Materials is building 60kt/a UHMWPE resin project, and Nanjing Jinling Plastic & Petrochemical is constructing 10kt/a UHMWPE project.

The UHMWPE market is expected to grow rapidly over the next couple of years with completion and operation of new enterprises and capacity expansion of existing companies going simultaneously. High-performance, low-cost and special-purpose will be main trends of UHMWPE resin. If Chinese producers wish to grab a larger market share, they must improve the quality of products, beside price factor.

Global and China Ultra High Molecular Weight Polyethylene (UHMWPE) Industry Report, 2017-2021 highlights the followings:

Global and Chinese UHMWPE resin market (supply & demand, price, competitive landscape, development trends, etc.);

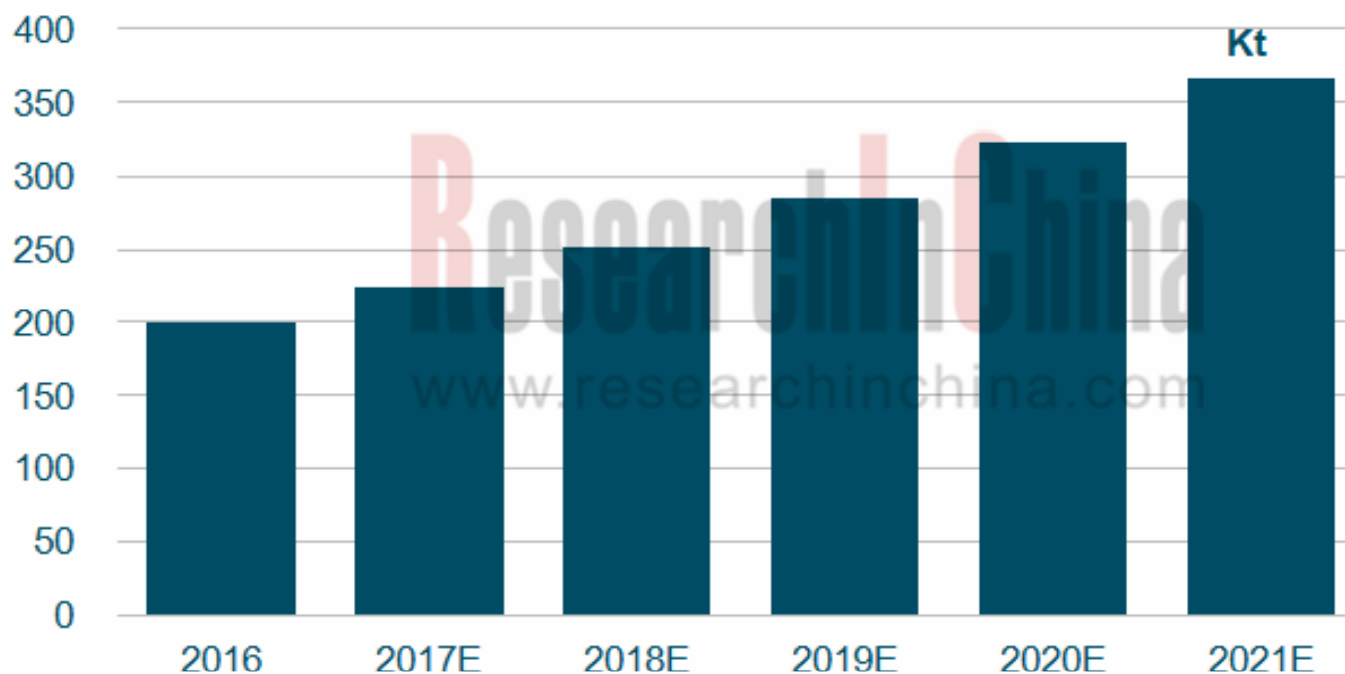
Global and Chinese UHMWPE fiber market (status quo, demand, competitive landscape, development trends, etc.);

UHMWPE sheet, pipe, and lithium-battery separator markets;

12 major global and Chinese UHMWPE resin enterprises (operation, development strategies, etc.);

13 major global and Chinese UHMWPE fiber enterprises (operation, development strategies, etc.).

Global UHMWPE Resin Demand, 2016-2021E



Source: Global and China Ultra High Molecular Weight Polyethylene (UHMWPE) Industry Report, 2017-2021

1. Overview

- 1.1 Definition
- 1.2 Preparation Technology
- 1.3 Industry Chain
- 1.4 Development Course

2. UHMWPE Resin Market

- 2.1 Global Market
 - 2.1.1 Supply
 - 2.1.2 Demand
- 2.2 Chinese Market
 - 2.2.1 Status Quo
 - 2.2.2 Demand
- 2.3 Price
- 2.4 Competitive Pattern
 - 2.4.1 Market Share
 - 2.4.2 Capacity
- 2.5 Development Trend

3. UHMWPE Fiber Market

- 3.1 Overview
- 3.2 Global Market
 - 3.2.1 Status Quo
 - 3.2.2 Demand
- 3.3 Chinese Market
 - 3.3.1 Status Quo
 - 3.3.2 Policy
 - 3.3.3 Demand

- 3.4 Corporate Pattern
- 3.5 Development Trend

4. Other UHMWPE Products Market

- 4.1 UHMWPE Sheets
 - 4.1.1 Status Quo
 - 4.1.2 Corporate Pattern
- 4.2 UHMWPE Pipes
 - 4.2.1 Status Quo
 - 4.2.2 Corporate Pattern
- 4.3 UHMWPE Lithium Battery Separator
 - 4.3.1 Lithium Battery Separator Market
 - 4.3.2 UHMWPE Lithium Battery Separator Market

5. UHMWPE Resin Companies

- 5.1 Celanese
 - 5.1.1 Profile
 - 5.1.2 Operation
 - 5.1.3 UHMWPE Business
 - 5.1.4 Development in China
- 5.2 Braskem
 - 5.2.1 Profile
 - 5.2.2 Operation
 - 5.2.3 UHMWPE Business
- 5.3 DSM
 - 5.3.1 Profile
 - 5.3.2 Operation
 - 5.3.3 UHMWPE Business

- 5.3.4 Development in China
- 5.4 Mitsui Chemicals
 - 5.4.1 Profile
 - 5.4.2 Operation
 - 5.4.3 UHMWPE Business
 - 5.4.4 Development in China
- 5.5 Asahi Kasei
 - 5.5.1 Profile
 - 5.5.2 Operation
 - 5.5.3 UHMWPE Business
 - 5.5.4 Development in China
- 5.6 Shanghai Research Institute of Chemical Industry
 - 5.6.1 Profile
 - 5.6.2 Operation
 - 5.6.3 UHMWPE Business
- 5.7 Shanghai Lianle Chemical Industry Science and Technology Co., Ltd.
- 5.8 Henan Wosen Ultra-high Chemical Industry Science and Technology Co., Ltd.
- 5.9 Sinopec Qilu Petrochemical Company
- 5.10 Jiujiang Zhongke Xinxing New Materials Co., Ltd.
- 5.11 Wuxi Fukun Chemical Co., Ltd.
- 5.12 Anhui Tejjajin Fine Chemicals Co., Ltd.

6. UHMWPE Fiber Companies

- 6.1 Toyobo
 - 6.1.1 Profile
 - 6.1.2 Operation

- 6.1.3 UHMWPE Fiber Business
- 6.1.4 Development in China
- 6.2 Honeywell
 - 6.2.1 Profile
 - 6.2.2 Operation
 - 6.2.3 UHMWPE Fiber Business
 - 6.2.4 Development in China
- 6.3 Beijing Tongyizhong Specialty Fiber Technology & Development Co., Ltd.
 - 6.3.1 Profile
 - 6.3.2 UHMWPE Fiber Business
- 6.4 Jiangsu Bicon Pharmaceutical Listed Company
 - 6.4.1 Profile
 - 6.4.2 Operation
 - 6.4.3 UHMWPE Fiber Business
- 6.5 Jiangsu Bicon Pharmaceutical Listed Company
- 6.6 Shandong ICD High Performance Fibre Co., Ltd.
- 6.7 Jiangsu Zhongyi Special Fiber Co., Ltd.
- 6.8 Ningbo Dacheng New Materials Co., Ltd.
- 6.9 Shanghai SURREY Technology Co., Ltd.
- 6.10 Sinopec Yizheng Chemical Fibre Co., Ltd.
- 6.11 Beijing Winyarn High Performance Fiber Co., Ltd.
- 6.12 Jian Qiao Technology Co., Ltd.
- 6.13 Zhejiang Qianxilong Special Fiber Co., Ltd.

- Molecular Structure of Ultra high Molecular Weight Polyethylene (UHMWPE)
- Overall Properties of UHMWPE
- Main Excellent Properties of UHMWPE
- Synthesis Methods of UHMWPE
- UHMWPE Industry Chain
- Main Applications of UHMWPE
- Development History of UHMWPE Industry
- Global UHMWPE Resin Capacity, 2016-2021E
- Global UHMWPE Resin Demand, 2016-2021E
- Development History of UHMWPE Resin in China
- UHMWPE Resin Demand in China, 2016-2021E
- UHMWPE Resin Consumption Structure in China, 2016
- Prices of Major Global and Chinese UHMWPE Resin Companies, 2017
- Market Share of UHMWPE Resin Companies in China by Capacity, 2017
- Major Global and Chinese UHMWPE Resin Producers and Their Capacity, 2017
- Major Global UHMWPE Producers and Their UHMWPE Resin Brands
- Development Trends of UHMWPE Resin
- Global and Chinese UHMWPE Resin Demand, 2016-2021E
- Excellent Properties of UHMWPE Fiber
- UHMWPE Fiber Synthesized by Dry Process
- UHMWPE Fiber Industry Chain
- Performance Parameters of Resins for UHMWPE Fiber
- Global UHMWPE Fiber Capacity, 2015-2021E
- Global UHMWPE Fiber Demand, 2015-2021E
- UHMWPE Fiber Demand Structure in European and American Region by Purpose, 2016

- Main Applications of UHMWPE Fiber
- UHMWPE Fiber Applied in Aircraft Radar Cover
- UHMWPE Fiber Applied in Aircraft Structure and Space Suit
- UHMWPE Fiber Applied in Nautical Equipment
- UHMWPE Fiber Applied in Amphibious Aircraft Equipment
- UHMWPE Fiber Applied in Anti-cutting Gloves
- Policies Concerning UHMWPE Fiber in China
- UHMWPE Fiber Demand in China, 2015-2021E
- UHMWPE Fiber Demand Structure in China by Purpose, 2016
- Major Global and Chinese UHMWPE Fiber Companies and Their Capacity, 2017
- Development Trends of UHMWPE Fiber in China
- Intelligent Manufacturing Trends of Chemical Fiber Industry
- Development Trends of Internet+ Textile Information Technology
- Major UHMWPE Sheet Manufacturers in China and Their Capacity, 2017
- Performance of UHMWPE Pipeline
- Comparison of Performance between UHMWPE Pipeline and Other Pipelines
- UHMWPE Pipeline Applied in Channel
- UHMWPE Pipeline Applied in Municipal Engineering
- Major UHMWPE Pipeline Manufacturers in China and Their Number of Production Lines
- Micrograph of Wet-process PE Separator
- Global Lithium Battery Separator Shipments by Product, 2012-2022E
- Lithium Battery Separator Output in China, 2009-2016
- Separator Output in China by Technology Roadmap--Wet-process
- Separator Growing Faster than Dry-process Separator, 2014-2020E
- Market Share of Wet-process Separator in Global and China Markets, 2015

- Market Share of Global Wet-process Separator Companies, 2015
- Techniques Process of International Lithium Battery Separator Manufacturers
- Resins for UHMWPE Used in Lithium Battery Separator
- Celanese's Product Layout
- Global Presence of Celanese's Factories
- Celanese's Revenue and Net Income, 2012-2017
- Celanese's Quarterly Sales, 2017
- Celanese's Sales Structure by Business, 2015-2017
- Celanese's Sales Structure by Region, 2014-2016
- Main Products of Celanese's Advanced Engineered Materials Division
- Celanese's UHMWPE Factories
- Celanese's Increase in Price of UHMWPE Products, Mar 2017
- Celanese's UHMWPE Product Models
- Celanese's Sales in China and % of Total Revenue, 2014-2016
- Braskem's Profile
- Braskem's Global Presence
- Braskem's Operating Data, 2015-2016
- Braskem's Capacity by Product, 2002-2016
- Braskem's Business Model, 2016
- Braskem's Revenue Structure by Business, 2016
- Braskem's Revenue Structure by Region, 2016
- Braskem's PE Capacity Expansion
- Main Brands and Performance of Braskem's UHMWPE Products
- DSM's Development History
- DSM's Fact, 2016

- DSM's Sales and Net Income, 2012-2017
- DSM's Sales Breakdown by Business, 2015-2017H1
- DSM's Sales Structure by Terminal Market, 2015-2016
- DSM's Sales Structure by Region, 2016
- Operation of DSM's Material Business, 2012-2016
- Product Development Trends of DSM's Material Business
- Overview of DSM's Dyneema Products
- Industry Chain of DSM's Dyneema Products
- Main Downstream Markets of DSM's UHMWPE Products
- Operation of DSM's Dyneema Products, 2016
- DSM's Dyneema Product Sales by Region, 2016
- DSM's Dyneema Product Sales by Downstream Market, 2016
- DSM's Global Layout of UHMWPE Products
- Mitsui Chemicals' Operating Data, FY2010-FY2017
- Mitsui Chemicals' Operating Data, FY2017Q1
- Mitsui Chemicals' Sales Breakdown by Business, FY2015-FY2017
- Mitsui Chemicals' Sales Breakdown and Operating Income by Business, FY2017Q1
- Mitsui Chemicals' Sales Structure by Region, FY2012-FY2017
- Mitsui Chemicals' Medium-term Plan, FY2014-FY2020
- Mitsui Chemicals' Business Development Goals, 2025
- Mitsui Chemicals' Investment Plans, FY2017-FY2020
- Main Purposes of Mitsui Chemicals' UHMWPE
- Mitsui Chemicals' Sales in China and % of Total Revenue, FY2012-FY2016
- Presence of Mitsui Chemicals' Factories in China
- Global Presence of Asahi Kasei's R&D Bases

- Asahi Kasei's Operating Data, FY2015-FY2017
- Asahi Kasei's Sales Breakdown and Operating Income by Division, FY2015-FY2017
- Asahi Kasei's Sales Breakdown and Operating Income by Business, FY2017Q1
- Asahi Kasei's Sales Goals by Business, 2025
- Asahi Kasei's Sales in China and % of Total Revenue, FY2015-FY2016
- Presence of Mitsui Chemicals' Subsidiaries in China
- Revenue and Net Income of Shanghai Research Institute of Chemical Industry, 2012-2017
- UHMWPE Catalytic R&D Status of Shanghai Research Institute of Chemical Industry
- Models and Performance Parameters of Shanghai Lianle Chemical Industry's Main UHMWPE Products
- Brands and Performance Parameters of Sinopec Qilu Petrochemical's Main UHMWPE Products
- Operating Data of Anhui Tejjajin Fine Chemicals, 2013-2016
- Toyobo's Operating Data, FY2013-FY2017
- Toyobo's Sales Breakdown by Business, FY2013-FY2018
- Toyobo's Operating Income by Business, FY2013-FY2017
- Toyobo's Sales Structure by Region, FY2016
- Main Models and Performance of Toyobo's UHMWPE Fiber Products
- Performance of Toyobo's UHMWPE Fiber
- Main Purposes of Toyobo's UHMWPE Fiber
- Honeywell's Net Sales and Net Income, 2010-2016
- Honeywell's Net Sales Structure by Business, 2016
- Honeywell's Sales Structure by Region, 2016
- Honeywell's Sales Structure by Terminal Market, 2016
- Honeywell's Businesses at a Glance
- Honeywell's Development History in China by Business, 1994-2017
- Development History of Beijing Tongyizhong Specialty Fiber's UHMWPE Fiber Products

- Revenue and Net Income of Jiangsu Bicon Pharmaceutical, 2014-2017
- Revenue Structure of Jiangsu Bicon Pharmaceutical by Business, 2016-2017
- Revenue Structure of Jiangsu Bicon Pharmaceutical by Product, 2016-2017
- Revenue Structure of Jiangsu Bicon Pharmaceutical by Region, 2016-2017
- UHMWPE Fiber Capacity of Jiangsu Bicon Pharmaceutical, 2016-2020E
- Operating Business Distribution of Hunan Zhongtai Special Equipment
- Main Models and Parameters of Hunan Zhongtai Special Equipment's UHMWPE Fiber
- Development History of Shandong ICD High Performance Fibre's UHMWPE Fiber
- UHMWPE Fiber Product Models of Shandong ICD High Performance Fibre
- Layout and Development History of Jiangsu Zhongyi Special Fiber's UHMWPE Fiber
- Development History and Operating Business of Ningbo Dacheng New Materials
- Models and Performance Parameters of Ningbo Dacheng New Materials' Main UHMWPE Fiber Products
- Operating Business Layout and Development History of Shanghai SURREY Technology
- Operating Business and Development History of Sinopec Yizheng Chemical Fibre
- Operating Business Distribution and Development History of Jian Qiao Technology

You can place your order in the following alternative ways:

1. Order online at www.researchinchina.com
2. Fax order sheet to us at fax number: +86 10 82601570
3. Email your order to: report@researchinchina.com
4. Phone us at +86 10 82600828/ 82601561

Party A:			
Name:			
Address:			
Contact Person:		Tel	
E-mail:		Fax	

Party B:			
Name:	Beijing Waterwood Technologies Co., Ltd (ResearchInChina)		
Address:	Room 502, Block 3, Tower C, Changyuan Tiandi Building, No. 18, Suzhou Street, Haidian District, Beijing, China 100080		
Contact Person:	Liao Yan	Phone:	86-10-82600828
E-mail:	report@researchinchina.com	Fax:	86-10-82601570
Bank details:	Beneficial Name: Beijing Waterwood Technologies Co., Ltd Bank Name: Bank of Communications, Beijing Branch Bank Address: NO.1 jinxiyuan shijicheng, Landianchang, Haidian District, Beijing Bank Account No #: 110060668012015061217 Routing No #: 332906 Bank SWIFT Code: COMMCNSHBJG		

Title	Format	Cost
<i>Total</i>		

Choose type of format

- PDF (Single user license)2,600 USD
- Hard copy 2,800 USD
- PDF (Enterprisewide license)..... 3,900 USD

※ Reports will be dispatched immediately once full payment has been received.
Payment may be made by wire transfer or credit card via PayPal.

About ResearchInChina

ResearchInChina (www.researchinchina.com) is a leading independent provider of China business intelligence. Our research is designed to meet the diverse planning and information needs of businesses, institutions, and professional investors worldwide. Our services are used in a variety of ways, including strategic planning, product and sales forecasting, risk and sensitivity management, and as investment research.

Our Major Activities

- *Multi-users market reports*
- *Database-RICDB*
- *Custom Research*
- *Company Search*

RICDB (<http://www.researchinchina.com/data/database.html>), is a visible financial data base presented by map and graph covering global and China macroeconomic data, industry data, and company data. It has included nearly 500,000 indices (based on time series), and is continuing to update and increase. The most significant feature of this base is that the vast majority of indices (about 400,000) can be displayed in map.

After purchase of our report, you will be automatically granted to enjoy 2 weeks trial service of RICDB for free.

After trial, you can decide to become our formal member or not. We will try our best to meet your demand. For more information, please find at www.researchinchina.com

For any problems, please contact our service team at: