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Ceresana is the most trusted market research company for the industrial sector. In addition to single-client studies, our clients also profit from already more than 90 multi-client market studies. We would be pleased to assist your company in this challenging market environment!

Yours faithfully, Oliver Kutsch

Our studies - Your benefits
• Gain new customers
  Our studies show who are potential new customers and where you can find them
• Locate new procurement markets
  Recognize better or alternative sources of supply
• Improve your understanding of your competitors
  Who exactly are your competitors - and what are their strengths and weaknesses
• Obtain a more detailed picture of your segment
  Learn which time is the best for entering or leaving a market
• Have a look at the future
  Find out if new investments and technologies are worthwhile and how to gain access to future markets. We also show possible market scenarios
• Recognize opportunities and risks
  Identify opportunities and risks on your target markets in time

This study is useful for:
• Manufacturers and traders of polyurethanes (PUR), toluene diisocyanate (TDI), and methylene diphenyl diisocyanate (MDI)
• Producers of furniture, mattresses, foam-based products, cushions, insulating material, spray foam, coatings, varnishes, adhesives, binders, sealants, and rubber
• Manufacturers of auxiliaries and additives
• Associations and institutes
• Executive board, technology and production, strategic planning, R&D, market research, marketing, sales and distribution, procurement

In this brochure you will find the following information:
• An introduction on page 3
• A summary of the table of contents on page 4
• Following this, there are example pages from the study
• Please use the form on the last page to easily order your copy or a free reading sample!

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Polyurethane - Development Dynamics Due to Versatility

Polyurethane (PUR) is characterized by its longevity, versatility and dimensional stability. Due to its positive characteristics, this plastics is suitable for various application areas: from construction to foams for furniture and bedding, in transportation as well as in the production of paints, coatings, adhesives and sealants.

In 2014, a worldwide turnover of US$ 50 billion was achieved with PUR. The market research institute Ceresana expects annual revenues to increase by 4.8% p.a. to approximately US$ 74 billion until 2022.

Growth Market Construction Industry

A significant influencing factor for the PUR production is the increasing focus on energy efficiency. Reasons therefore are the climate change, the increasing mobility and the necessity for conserving of resources. Especially in the segment of construction, which is the largest application area of Polyurethane, this leads to an increased use as insulation. Here, the country specific measurements of government aid for an increase in energy efficiency is a major influencing factor. Ceresana expects that globally, the demand in the construction segment will rise by 4.6% p.a. in the future.

TDI vs. MDI

In order to create a full transparency of the PUR market, the analysts of Ceresana examined the two primary products methylene diphenyl diisocyanate (MDI) and toluene diisocyanate (TDI) as well. Due to the different application areas of TDI and MDI based PUR, the demand for PUR, MDI, and TDI will be split by respective applications in detail.

MDI based PUR generated almost 55% of the annual PUR demand in 2014. Additionally, its annual growth of 4.2% will be above the one of TDI. This is a result of the positive development of the construction industry where MDI based PUR is dominant and the weaker development of furniture and bedding which is the most important sales market for TDI.

The Study in Brief:

Chapter 1 is a description and analysis of the global PUR market. Development of demand, revenues, and production are explained in detail. Demand will be split by MDI and TDI based polyurethane.

This report offers a comprehensive overview over development expected for 20 individual countries and 7 regions as well as global market dynamics. Additionally, demand for the isocyanates MDI and TDI as well as their present and prospective capacities are taken into consideration.

Chapter 2 examines the 20 largest countries of the market in more detail: Detailed information is given regarding demand, revenues, production, trade, and demand for isocyanates. Demand for PUR, MDI, and TDI is analyzed explicitly and is split by respective areas of application in detail.

Chapter 3: The areas of application of PUR are analyzed in detail: Data on demand development is split by the 7 regions Western Europe, Eastern Europe, North America, South America, Asia-Pacific, the Middle East, and Africa. Also, consumption figures for the 20 most important countries in each region will be given. Included in the considered application areas are construction, furniture/bedding, transportation, paints & coatings, adhesives & sealants, other applications (rubber, leisure and sports goods, electrics and electronics, textiles, packaging).

Chapter 4 provides a useful list of producers that manufacture MDI and TDI, clearly arranged according to contact details, turnover, profit, product range, production sites, profile summary, productspecific information as well as existing and future capacities of individual production sites. Comprehensive profiles are given of 23 producers, e.g. BASF SE, Chemtura Corporation, Sadara Chemical Company, Sumitomo Chemical Co., The Dow Chemical Company, Vencorex Holding SAS, and Wanhua Chemical Group Co.

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1 Market Data

1.1 World
1.1.1 Demand
1.1.2 Revenues
1.1.3 Production
1.1.4 Isocyanates (MDI/TDI)

1.2 Western Europe

...  

1.3 Eastern Europe

...  

1.4 North America

...  

1.5 South America

...  

1.6 Asia-Pacific

...  

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2.4 South America
2.4.1 Argentina

2.4.2 Brazil

...  

2.1.1 Belgium

2.1.1.1 Demand and Revenues

2.1.1.2 Production and Trade

2.1.1.3 Isocyanates (MDI/TDI)

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2.1.3 Germany

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...  

2.1.5 Spain

...  

2.1.6 The Netherlands

...  

2.1.6 United Kingdom

...  

2.1.7 Rest of Western Europe

...  

2.2 Eastern Europe
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...  

2.2.2 Poland

...  

2.2.3 Russia

...  

2.2.4 Turkey

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2.2.5 Rest of Eastern Europe

...  

2.3.3 USA

...  

2.3.4 Canada

...  

2.3.5 Mexico

...  

2.3.6 Central America

...  

2.4.3 Rest of South America

...  

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2.5.2 India

...  

2.5.3 Japan

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2.5.4 South Korea

...  

2.5.5 Rest of Asia-Pacific

...  

3 Applications
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3.1.2 Furniture / Bedding
3.1.3 Transportation
3.1.4 Paints / Coatings
3.1.5 Adhesives / Sealants
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...  

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3.4 North America

3.5 South America

3.6 Asia-Pacific

3.7 Middle East

3.8 Africa

4 Company Profiles
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4.1.2 Germany (2)

4.2 North America
4.2.1 USA (3)

4.3 South America
4.3.1 Argentina (1)

4.4 Asia-Pacific
4.4.1 China (6)
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4.4.3 Japan (3)
4.4.4 South Korea (4)

4.5 Middle East
4.5.1 Iran (1)

4.6 Saudi Arabia (1)

Example from chapter 1
Market analysis in regard to production, consumption, and revenues

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1.2.2 Production

About X million tonnes of PUR were produced in Western Europe in 2014. Accounting for a share of X % of total Western European output in 2014, Germany is the largest producer of PUR in this region. Belgium and Italy ranked second and third respectively.

We expect output in Germany to continue to increase by X % p.a. until 2022 while development in Italy and France is anticipated to be less dynamic.

Graph: Production of PUR in Western Europe from 2006 to 2022

1.2.3 Isocyanates (MDI/TDI)

Between 2006 and 2014, demand for MDI rose from X million tonnes to X million tonnes. By far the largest sales market that year was Germany. In the upcoming eight year period, MDI consumption in this region is likely to increase by, on average, X % p.a. to approx. X million tonnes. The Western European demand for TDI rose from X tonnes in 2006 to X tonnes in 2014. The largest sales market that year was Italy. Demand for TDI is projected to increase at accelerated rates of X % p.a. to approx. X tonnes.

Graph: MDI and TDI demand in Western Europe from 2006 to 2022

Chapter 2: Specific analyses and forecasts for 20 individual countries:

- Production, revenues, and trade of PUR
- PUR demand in individual application areas
- MDI and TDI demand in individual application areas
- Existing and future capacities of TDI and MDI
- MDI and TDI demand

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Table: MDI capacity in Western Europe during 2014 - split by countries

<table>
<thead>
<tr>
<th>Country</th>
<th>In tonnes</th>
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<td>Germany</td>
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<td>Belgium</td>
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Table: TDI capacity in Western Europe during 2014 - split by countries

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<th>Country</th>
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In China, a constant production growth rate in the segment transportation was perceivable in the past years. In 2013, 22.12 million vehicles were produced, in 2014 this number rose to 23.72 million. China presents the worldwide largest transportation market. The growing number of production is due to the growing domestic demand for cars. The segment of commercial vehicles registered a slight decrease in 2014 compared to the previous year. Since the used car trade is growing the demand for new cars will decrease in the future. In the medium term, growth will be considerably weaker. A reason for this is the less strong economic development and the fact that individual vehicle circulation will probably be restricted in major cities due to the enormous air pollution. However, the continuously growing numbers of production in the transportation segment have positive effects on the demand for polyurethane in the automotive construction.

Production of Furniture and Bedding ranked second in the demand for PU. Reporting a market volume of X million tonnes, the segment of furniture and bedding accounted for the largest part of TDI-based PUR consumption. We forecast the highest relative increase between 2014 and 2022 for the segment construction industry and transportation. Demand is projected to increase at rates of X % p.a. and X % p.a. respectively.

Table: Demand for PUR based on MDI in China from 2006 to 2022 – split by application areas

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Table: PUR demand in China from 2006 to 2022 – split by application areas

3.1.1 Construction

In 2014, X million tonnes of PUR were demanded worldwide for application in the construction industry. Given an expected X % p.a. increase, global demand for PUR used in the construction segment will amount to approx. X million tonnes in 2022. The most important application of PUR in the construction industry is the insulation of buildings. Given their longevity and comparatively low prices, polyurethanes are a very good option for insulating applications. They help to increase energy efficiency of buildings and to reduce CO2 emissions. In colder climates, polyurethanes contain the warmth within the building and in warmer climates they contribute to maintaining lower temperatures inside. Usually, walls, roofs, pipes, and floors are insulated. Advantageous properties of polyurethanes are their longevity and moderate space requirements. Spray foams based on PUR are particularly suitable for refurbishment and modernization of older buildings. Companies engage in continuous research in order to improve, e.g., insulating properties or flame retardancy of PUR.

Chapter 3: Detailed data and influential factors on the use of PUR in:
- Construction
- Furniture / Bedding
- Transportation
- Paints & Coatings
- Adhesives & Sealants
- Other applications (leisure and sports goods, rubber, electronics and textiles, packaging)
Thank you for your confidence!

For 15 years, more than 10,000 small, medium-sized, and multinational enterprises from over 60 countries have been benefiting from our studies.

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- Automotive Plastics - World
- Bags & Sacks - Europe
- Bags & Sacks - World
- Biocides - World
- Bioplastics - World
- Bitumen - Europe
- Butadiene - World
- Butadiene Rubber (BR) - World
- Caps & Closures - Europe
- Carbon Black - World
- Catalysts - World
- Chelating Agents - World
- Composites (CFRP & GFRP) - World
- Construction Plastics - World
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- Engineering Plastics - World
- Ethylene - World
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- Flame Retardants - World
- Flexible Packaging - Europe
- Food Packaging - Europe
- Hydrofluoric Acid & Fluorochem. - World
- Insulation Material - Europe
- Insulation Material - World
- Labels - Europe
- Masterbatches - World
- Paints & Varnishes - Europe
- Paints & Varnishes - World
- Pigments - World
- Pipes - Europe
- Plastic Additives - World
- Plastic Bottles - Europe
- Plastic Caps & Closures - Europe
- Plastic Caps & Closures - World
- Plastic Containers - Europe
- Plastic Extrusion - World
- Plastic Films - Europe
- Plastic Films - World
- Plastic Injection - World
- Plastic Pipes - Europe
- Plastic Pipes - World
- Plastic Windows - World
- Plasticizers - World
- Plastics - Europe
- Plastics - World
- Polyamide (PA6 & PA66) - World
- Polyethylene (HDPE) - World
- Polyethylene (LDPE) - World
- Polyethylene (LLDPE) - World
- Polyethylene (PE) Pipes - World
- Polypropylene - World
- Polystyrene - World
- Polystyrene & Expandable PS - World
- Polyurethanes & Isocyanates - World
- Polyvinyl Chloride (PVC) - World
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- Styrene-Butadiene Rubber (SBR) - World
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- Synthetic Rubber - World
- Thermoplastic Elastomers - World
- Titanium Dioxide - World
- Windows & Doors - Europe