

**WORLDWIDE FLEXIBLE POLYMERS
MARKETS, TECHNOLOGIES & TRENDS
2003-2008**

**Prospectus For
An In-Depth Strategic Analysis
Available for Immediate Delivery**

How is the flexible polymer industry classified?
What is the future of flexible polymer industry?
What is the position of flexible polymers compared to all polymers?
HOW DOW YOU DEFINE AN IDEAL FLEXIBLE POLYMER COMPANY?
Who are the major suppliers of flexible polymers?
Who is in the position to build an ideal flexible polymer company if it exists?
What are the critical factors enabling suppliers to gain competitive advantage?



What are the critical markets for flexible polymers future growth?
What are the critical markets that helped the growth of flexible polymers in past?
**CAN THE SYNERGIES BETWEEN DIFFERENT FLEXIBLE POLYMERS
HELP SUPPLIERS IN GAINING A COMPETITIVE ADVANTAGE?**
What are the growth markets? What are the met/unmet needs? By Region
What is the role of end users to thrive and grow flexible polymers?



What is the role of flexible PVC in the flexible polymer industry?
**WHAT ARE THE MAJOR EVENTS EVOLVING/SHAPING THE FUTURE OF
FLEXIBLE POLYMERS INDUSTRY ?**
What is the role of polyolefins in the flexible polymer industry?

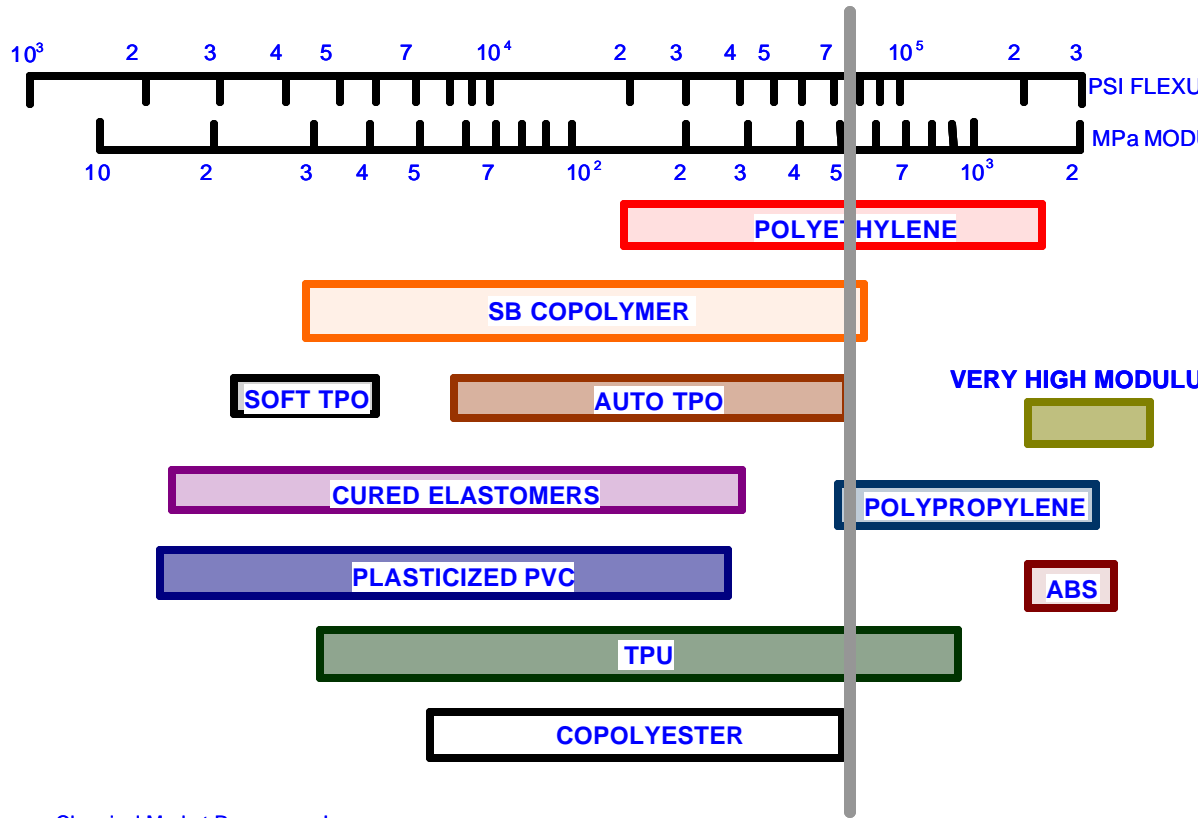


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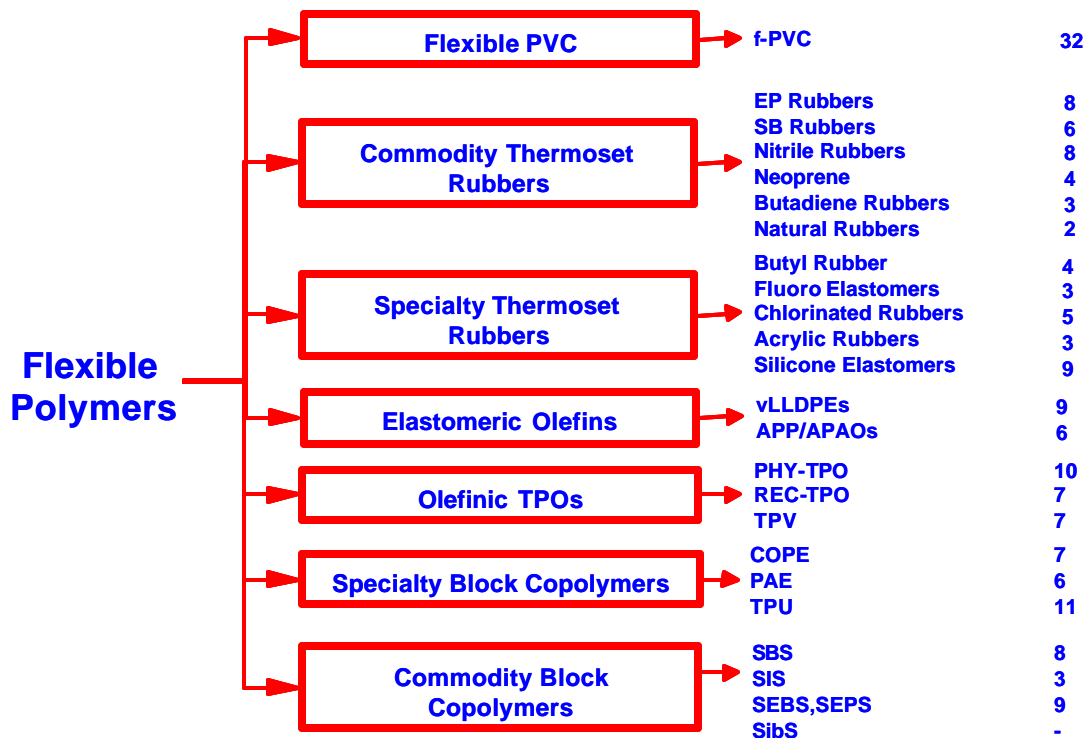
Exhibit 1 – Comparative Stiffness of Various Polymers



Source: Chemical Market Resources, Inc.

Exhibit 2 – Flexible Polymer Classification

7 Heritages 23 Families 170 Markets



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WORLDWIDE FLEXIBLE POLYMERS MARKETS, TECHNOLOGIES & TRENDS 2003-2008

INTRODUCTION

Flexible polymers are mainly defined on the basis of flexural modulus at the end product level. The other scales that are commonly used to define the flexural characteristics include the hardness based on Shore A and Shore D. CMR defines flexible materials as all materials having flexural modulus less than 500 MPa and/or 70,000 psi. These products also fall in the range of Shore D of less than 50. **Exhibit 1** presents the flexural modulus of all the materials available in the market today. The materials are presented on the scale of flexural modulus measured in terms of psi and MPa. **Exhibit 2** classifies all the materials that fall under the definition of flexural modulus less than 500 MPa. These materials are classified into 7 heritages, 23 families, and 170 markets.

The total consumption of plastics/polymers globally has reached 390 billion pounds in 2002. The total consumption of the flexible polymers that meet the definition of flexural modulus less than 500 MPa was 76 billion pounds – with a value of approximately \$40.2 billion. The largest demand for flexible polymers is in rest of the world accounting for 42% of the total flexible polymer demand. North America and Europe account for 23% and 25% of the total flexible polymer demand respectively while Japan accounts for 10% of the total flexible polymer demand.

Flexible PVC, Natural Rubber, SB Rubber, Butadiene Rubbers, and EP(D)M together account for approximately 88% of the total flexible polymer consumption driven solely by a combination of transportation and construction. All the other types of flexible polymers including: (1) TPEs, (2) specialty elastomers, and (3) polyolefin extensions account for the remaining 12% of the consumption. However, on a value basis, they account for almost 29%. This doubling of the value is the major driving focus and new product development area.

A NEW MULTICLIENT STUDY

Chemical Market Resources, Inc., with our extensive experience in (1) flexible polymers, (2) all other polymers, and (3) flexible PVC, is undertaking a comprehensive global strategic business/technical analysis that reports on this fast-changing intermaterial competition arena. Our in-depth examination and methodology are designed to assist companies in monitoring the rapid developments, analyzing the trends and capitalizing on the many opportunities in these changing markets and technologies.

The report will benefit: (1) present and future flexible polymers participants, (2) polyolefin and elastomers producers, compounders and end users, (3) other polyolefin industry participants, and (4) the individual end users, entrepreneurs, and organizations attempting to understand these complex issues and capture future growth in the marketplace.



OBJECTIVES

- ❖ *Define the worldwide status of flexible polymer markets in terms of: (1) end use markets, (2) trends and (3) regional differences*
- ❖ *Define and classify the flexible polymers in a disciplined fashion*
- ❖ *Understand and present the raw material and end-use markets synergies that determine the participation of various suppliers*
- ❖ *Provide an accurate assessment of the future of flexible polymers while keeping in view the history/evolution of the flexible polymer industry*
- ❖ *Assist flexible polymer producers and converters with an assessment of the current and future intermaterial competition and possible product substitution strategic options*
- ❖ *Assist compounders, and suppliers in assessing the impact of these issues in the near future.*

KEY ISSUES TO BE ADDRESSED

- ❖ *The worldwide flexible polymers market/technology status and concerns of: (1) end users, (2) producers and (3) competing material suppliers in North America, Western Europe, Japan, Asia/Pacific and Rest of the World*
- ❖ *Worldwide resin, compound and additive supplier responses to key issues*
- ❖ *Suppliers' current and future impact of key issues on flexible polymers markets and their vulnerability in selected end use markets with multi-attribute analysis of met/ unmet needs of flexible polymers in over 50 end uses.*

TIMING & SUBSCRIPTION INFORMATION

An order form is included as the last page of this prospectus. The report is **AVAILABLE FOR IMMEDIATE DELIVERY**. Please call Chemical Market Resources Inc. for subscription and pricing information.

APPROACH

The information, data and conclusions of this analysis will be developed from sources in North America, Western Europe, Japan, and Asia and are based upon, but not limited to, the following methods:

- ❖ *Search, review and interpretation of information from government sources, trade and industry groups, public interest groups, government agencies, published articles and product promotional information*
- ❖ *Information from private experts and CMR proprietary projects (over 20 of them related to these topics in the last two years)*
- ❖ *Interviews with leading flexible polymers suppliers, end users and distributors*
- ❖ *The major technology suppliers and ENC organizations*
- ❖ *The systematic approach to market quantification, assessment and opportunity analysis by end use and region*



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2. Soft TPOs
3. Metallocenes 2000
4. Elastomeric Polyolefins
5. EP Elastomers
6. Intermaterial Competition of Flexible PVC, TPEs and EP(D)M Rubbers versus New Generation Polyolefins
7. High EVA Copolymers
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