

# **Smart Polymers Market by Type (Physical Stimuli, Chemical Stimuli, and Biological Stimuli Responsive Polymers), End-Use Industry (Biomedical & Biotechnology, Textile, Electrical & Electronics, Automotive), and Region - Global Forecast to 2022**

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## **Abstracts**

Smart polymers market expected to grow at a CAGR of 21.9% during the forecast period

The smart polymers market is projected to reach USD 2,071.1 million by 2022, at a CAGR of 21.9% between 2017 and 2022. Smart polymers are also known as stimuli responsive polymers that react to different external stimuli such as pH change, UV light, temperature change, pressure, magnetic or electric field, and enzymatic changes. Increasing adoption of smart polymers in the automotive and drug delivery sectors is expected to drive the global smart polymers market during the forecast period. High cost of technology development and polymer production may act as restraints for the smart polymers market.

Physical stimuli responsive polymers projected to be the fastest-growing type of smart polymers

The physical stimuli responsive polymers segment is projected to witness the highest CAGR during the forecast period. Polymers under this type respond to several stimuli such as temperature, light, pressure, electric field, and magnetic field. The growth of this type of polymers is directly associated with the growing demand for innovative technologies in end-use industries such as biomedical & biotechnology, automotive, and textiles.

Biomedical & biotechnology industry projected to be the fastest-growing end-use industry for smart polymers

The smart polymers market in the biomedical & biotechnology industry is projected to register the highest growth during the forecast period. Consumption of smart polymers in this end-use industry is growing due to the rising demand for highly efficient polymers to manufacture effective drug delivery systems and phase separation processes. The use of smart polymers for the treatment of cancer and diabetes has gained significant importance as these can deliver the therapeutic agent for a prolonged period of time at the targeted diseased area.

North America projected to be the fastest-growing market for smart polymers

North America is projected to be the fastest-growing market for smart polymers between 2017 and 2022. This high growth is due to increasing advancements in biomedical technologies and high investments in R&D activities. The US is projected to be the fastest-growing market for smart polymers in North America, followed by Canada and Mexico. Rising technological advancements in end-use industries, such as automotive, medical, textiles, and footwear are driving the smart polymers market in this region.

Extensive primary interviews were conducted to determine and verify the market size for several segments and subsegments and information gathered through secondary research.

The break-up of primary interviews is given below:

By Company Type - Tier 1 – 52%, Tier 2 – 26%, and Tier 3 – 22%

By Designation - Director Level – 23%, C level – 48%, and Others – 29%

By Region - Asia-Pacific– 39%, North America – 27%, Europe – 21%, and Others- 13%

Note: The tiers of companies are defined on the basis of their total revenues, as of 2016: Tier 1 = USD 500 million, Tier 2 = USD 100 million to USD 500 million, and Tier 3 = USD 100 million.

Others include sales managers, marketing managers, and product managers.

*Smart Polymers Market by Type (Physical Stimuli, Chemical Stimuli, and Biological Stimuli Responsive Polymers)...*

Others include South America and the Middle East & Africa.

The companies profiled in this market research report include BASF (Germany), Lubrizol (US), Dow Chemical (US), Evonik (Germany), Advanced Polymer Materials (Canada), Spintech (US), Merck (Germany), Akina (US), SMP Technologies (Japan), Reactive Surfaces (US), and NEI Corporation (US).

#### Research Coverage:

This research report categorizes the smart polymers market on the basis of type, end-use industry, and region. The report includes detailed information regarding the major factors influencing the growth of the smart polymers market such as drivers, restraints, challenges, and opportunities. A detailed analysis of the key industry players has been undertaken to provide insights into business overviews, products & services, key strategies, expansions, acquisitions, new product developments, and recent developments associated with the market.

#### Reasons to Buy the Report

The report will help market leaders/new entrants in this market in the following ways:

1. This report segments the smart polymers market comprehensively and provides the closest approximations of market sizes for the overall market and subsegments across verticals and regions.
2. The report will help stakeholders understand the pulse of the market and provide them information on the key market drivers, restraints, challenges, and opportunities.
3. This report will help stakeholders understand the major competitors and gain insights to enhance their positions in their businesses. The competitive landscape section includes competitive leadership mapping, in which, the major players are ranked and grouped based on their competency and parameters such as geographical presence, recent strategic developments, and product offerings.

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