

# **Polymer Nanocomposites Market by Type (Carbon Nanotubes, Nanoclays, Metal Oxide, Ceramics), Application (Construction, Automotive, Electrical & Electronics, Packaging) - Global Opportunity Analysis and Industry Forecast, 2014-2022**

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## **Abstracts**

Polymer nanocomposites are materials consisting different types of nanofillers uniformly dispersed in the polymer matrices. These nanofillers may be carbon nanotubes, nanoclays, metal-oxide, ceramics, and graphene among others. Polymer nanocomposites are gaining acceptance worldwide due to their enhanced mechanical, chemical, and physical properties rendered in them by dispersion of fillers at the nanoscale.

In 2015, the world polymer nanocomposites market was valued at \$5,276 million and is projected to grow at a CAGR of 10.9% during 2016-2022. The growing demand for polymer nanocomposites from the automotive industry is the major driver for the polymer nanocomposites market. Polymer nanocomposite-enabled parts are gradually replacing the metal parts that are used in vehicles as they offer various advantages over them such as weight reduction, increased engine efficiency, fuel savings, reduced CO<sub>2</sub> emissions, and superior strength. The stringent regulations on the emission of CO<sub>2</sub> from vehicles also serve as an important factor supporting the growth of polymer nanocomposites in the automotive industry. Apart from their use in the automotive sector, polymer nanocomposites also find applications in the construction industry for repair and rehabilitation of buildings and bridges.

The world polymer nanocomposites market is segmented in this report on the basis of type, application, and geography. On the basis of type, the market is segmented into carbon nanotubes, nanoclays, metal-oxide, ceramics, and others. Nanoclays accounted for the highest revenue-generating segment of the world polymer nanocomposite market with three-fifth of the total market share in 2015. The market is segmented into

construction, automotive, electrical & electronics, packaging, and others on the basis of applications. The packaging industry is the fastest growing segment of the polymer nanocomposites industry owing to increasing demand for polymer nanocomposite-based packaging material due to their anti-microbial properties. Geographically, the market is segmented into North America, Europe, Asia-Pacific, and LAMEA. North America accounted for the highest revenue-generating region in 2015 and is expected to maintain its lead throughout the forecast period. It was followed by Europe with around one-third of the total market share. The development of new polymeric resins by European-based companies is a major factor that drives opportunities in the European polymer nanocomposites market. These polymeric resins can be used for the modification of thermoplastic elastomers and other polymers. In addition, the use of polymer nanocomposites in consumer products such as sports shoes is also driving the European market. The leading companies in this market have been proactively working towards their expansion as well as the launch of new polymer nanocomposite products. The major companies profiled in the report include:

DuPont

Nanophase Technologies Corporation

The Arkema Group

RTP Company

Showa Denko Carbon, Inc.

Powdermet, Inc.

Nanocor, Inc.

Inframat Corporation

Nanocyl S.A.

Evonik Industries AG

## Key Benefits

The report provides a comprehensive analysis of current and future market trends in the world polymer nanocomposites market to identify the potential investment pockets.

Current and future trends are outlined in the report to determine the overall attractiveness and to single out profitable trends to gain a stronger foothold in the market.

The report provides information regarding key drivers, restraints, and opportunities with impact analysis of the world polymer nanocomposites market.

The market projections for the period 2014–2022 have been included along with the impacting factors.

The report also provides quantitative as well as qualitative trends to help the stakeholders in understanding the situations prevailing in the market.

In-depth analyses of the key segments of the market demonstrate the consumption of polymer nanocomposites in different applications across different end user industries.

Competitive intelligence highlights the business practices adopted by the leading market players across various geographies.

## **KEY MARKET SEGMENTS**

The world polymer nanocomposites market segmentation is illustrated below:

By Type

Carbon nanotubes

Nanoclays

Metal oxide

Ceramics

Others

## By Application

Construction

Automotive

Electrical & Electronics

Packaging

Others

## By Geography

North America

Europe

Asia-Pacific

LAMEA

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