

# **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

## Contents

### CHAPTER 1 INTRODUCTION

- 1.1 Report Description
- 1.2 Key Benefits
- 1.3 Key Market Segments
- 1.4 Research Methodology
  - 1.4.1 Secondary Research
  - 1.4.2 Primary Research
  - 1.4.3 Analyst Tools And Models

### CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 CXO Perspective

### CHAPTER 3 MARKET OVERVIEW

- 3.1 Market Definition And Scope
- 3.2 Key Findings
  - 3.2.1 Top Investment Pockets
  - 3.2.2 Top Winning Strategies
- 3.3 Patent Analysis
  - 3.3.1 Patent Analysis by Year
  - 3.3.2 Patent Analysis by Region
  - 3.3.3 Patent Analysis by Company
- 3.4 Porters Five Forces Analysis
  - 3.4.1 Bargaining Power Of Suppliers
  - 3.4.2 Bargaining Power Of Buyers
  - 3.4.3 Threat Of Substitutes
  - 3.4.4 Threat Of New Entrants
  - 3.4.5 Intensity Of Competitive Rivalry
- 3.5 Market Dynamics
  - 3.5.1 Drivers
    - 3.5.1.1 Increasing Use of Polymer Nanocomposites in the Automotive Sector
    - 3.5.1.2 Growing Demand for Polymer nanocomposites from other sectors
    - 3.5.1.3 Enhanced physical and mechanical properties
    - 3.5.1.4 stringent government regulations for Automotive Emissions
  - 3.5.2 Restraints

3.5.2.1 High Cost of Processing and Research & Development

3.5.2.2 Environmental and Food Safety Issues

3.5.3 Opportunities

3.5.3.1 Increasing Adoption of Bio-Based Materials

3.5.3.2 Increase in Consumption of Graphene and Related Products

## **CHAPTER 4 WORLD POLYMER NANOCOMPOSITES MARKET BY TYPE**

4.1 Introduction

4.1.1 Market Size and Forecast

4.2 Carbon Nanotubes (CNT)

4.2.1 Key Market Trends

4.2.2 Key Opportunities and Growth Factors

4.2.3 Market Size and Forecast

4.3 Nanoclay

4.3.1 Key Market Trends

4.3.2 Key Opportunities and Growth Factors

4.3.3 Market Size and Forecast

4.4 Metal Oxide

4.4.1 Key Market Trends

4.4.2 Key Opportunities and Growth Factors

4.4.3 Market Size and Forecast

4.5 Ceramics

4.5.1 Key Market Trends

4.5.2 Key Opportunities and Growth Factors

4.5.3 Market Size And Forecast

4.6 Others

4.6.1 Key Market Trends

4.6.2 Key Opportunities and Growth Factors

4.6.3 Market Size and Forecast

## **CHAPTER 5 WORLD POLYMER NANOCOMPOSITES MARKET BY APPLICATION**

5.1 Introduction

5.1.1 Market Size and Forecast

5.2 Construction

5.2.1 Key Opportunities and Growth Factors

5.2.2 Market Size and Forecast

5.3 Automotive

- 5.3.1 Market Size and Forecast
- 5.4 Electrical And Electronics
  - 5.4.1 Market Size and Forecast
- 5.5 Packaging
  - 5.5.1 Key Opportunities and Growth Factors
  - 5.5.2 Market Size and Forecast
- 5.6 Others
  - 5.6.1 Market Size and Forecast

## **CHAPTER 6 WORLD POLYMER NANOCOMPOSITES MARKET BY GEOGRAPHY**

- 6.1 Introduction
  - 6.1.1 Market Size and Forecast
- 6.2 North America
  - 6.2.1 Key Market Trends
  - 6.2.2 Key Growth Factors and Opportunities
  - 6.2.3 Market Size and Forecast
- 6.3 Europe
  - 6.3.1 Key Market Trends
  - 6.3.2 Key Growth Factors and Opportunities
  - 6.3.3 Market Size and Forecast
- 6.4 Asia-Pacific
  - 6.4.1 Key Market Trends
  - 6.4.2 Key Growth Factors and Opportunities
  - 6.4.3 Market Size and Forecast
- 6.5 LAMEA
  - 6.5.1 Key Market Trends
  - 6.5.2 Key Growth Factors and Opportunities
  - 6.5.3 Market Size and Forecast

## **CHAPTER 7 COMPANY PROFILES**

- 7.1 Nanophase Technologies Corporation
  - 7.1.1 Company Overview
  - 7.1.2 Company Snapshot
  - 7.1.3 Operating Business Segments
  - 7.1.4 Business Performance
  - 7.1.5 Key Strategic Moves and Developments
- 7.2 THE ARKEMA GROUP

- 7.2.1 Company Overview
- 7.2.2 Company Snapshot
- 7.2.3 Operating Business Segments
- 7.2.4 Business Performance
- 7.2.5 Key Strategic Moves and Developments
- 7.3 E. I. DU PONT DE NEMOURS AND COMPANY
  - 7.3.1 Company Overview
  - 7.3.2 Company Snapshot
  - 7.3.3 Operating Business Segments
  - 7.3.4 Business Performance
  - 7.3.5 Key Strategic Moves and Developments
- 7.4 RTP COMPANY
  - 7.4.1 Company Overview
  - 7.4.2 Company Snapshot
  - 7.4.3 Operating Business Segments
  - 7.4.4 Key Strategic Moves and Developments
- 7.5 SHOWA DENKO CARBON, INC.
  - 7.5.1 Company Overview
  - 7.5.2 Company Snapshot
  - 7.5.3 Operating Business Segments
  - 7.5.4 Key Strategic Moves and Developments
- 7.6 INFRAMAT CORPORATION
  - 7.6.1 Company Overview
  - 7.6.2 Company Snapshot
  - 7.6.3 Operating Business Segments
- 7.7 POWDERMET, INC.
  - 7.7.1 Company Overview
  - 7.7.2 Company Snapshot
  - 7.7.3 Operating Business Segments
- 7.8 EVONIK INDUSTRIES AG
  - 7.8.1 Company Overview
  - 7.8.2 Company Snapshot
  - 7.8.3 Operating Business Segments
  - 7.8.4 Business Performance
- 7.9 Nanocor, Inc.
  - 7.9.1 Company Overview
  - 7.9.2 Company Snapshot
  - 7.9.3 Operating Business Segments
- 7.10 NANOCYL S.A.



- 7.10.1 Company Overview
- 7.10.2 Company Snapshot
- 7.10.3 Operating Business Segments
- 7.10.3 Key Strategic Moves and Developments

## List Of Tables

### LIST OF TABLES

TABLE 1 WORLD POLYMER NANOCOMPOSITES MARKET REVENUE, BY TYPE, 2014-2022 (\$MILLION)

TABLE 2 WORLD POLYMER NANOCOMPOSITES MARKET VOLUME, BY TYPE, 2014-2022 (KILOTONS)

TABLE 3 WORLD CARBON NANOTUBES MARKET REVENUE, BY APPLICATION, 2014-2022 (\$MILLION)

TABLE 4 WORLD CARBON NANOTUBES MARKET VOLUME, BY APPLICATION, 2014-2022 (KILOTONS)

TABLE 5 WORLD CARBON NANOTUBES MARKET REVENUE, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 6 WORLD CARBON NANOTUBES MARKET VOLUME, BY GEOGRAPHY, 2014-2022 (KILOTONS)

TABLE 7 WORLD NANOCCLAYS MARKET REVENUE, BY APPLICATION, 2014-2022 (\$MILLION)

TABLE 8 WORLD NANOCCLAYS MARKET VOLUME, BY APPLICATION, 2014-2022 (KILOTONS)

TABLE 9 WORLD NANOCCLAYS MARKET REVENUE, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 10 WORLD NANOCCLAYS MARKET VOLUME, BY GEOGRAPHY, 2014-2022 (KILOTONS)

TABLE 11 WORLD METAL OXIDES MARKET REVENUE, BY APPLICATION, 2014-2022 (\$MILLION)

TABLE 12 WORLD METAL OXIDES MARKET VOLUME, BY APPLICATION, 2014-2022 (KILOTONS)

TABLE 13 WORLD METAL OXIDES MARKET REVENUE, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 14 WORLD METAL OXIDES MARKET VOLUME, BY GEOGRAPHY, 2014-2022 (KILOTONS)

TABLE 15 WORLD CERAMICS MARKET REVENUE, BY APPLICATION, 2014-2022 (\$MILLION)

TABLE 16 WORLD CERAMICS MARKET VOLUME, BY APPLICATION, 2014-2022 (KILOTONS)

TABLE 17 WORLD CERAMICS MARKET REVENUE, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 18 WORLD CERAMICS MARKET VOLUME, BY GEOGRAPHY,

2014-2022(KILOTONS)

TABLE 19 WORLD OTHER POLYMER NANOCOMPOSITES MARKET REVENUE, BY APPLICATION, 2014-2022(\$MILLION)

TABLE 20 WORLD OTHER POLYMER NANOCOMPOSITES MARKET VOLUME, BY APPLICATION, 2014-2022(KILOTONS)

TABLE 21 WORLD OTHER POLYMER NANOCOMPOSITES MARKET REVENUE, BY GEOGRAPHY, 2014-2022(\$MILLION)

TABLE 22 WORLD OTHER POLYMER NANOCOMPOSITES MARKET VOLUME, BY GEOGRAPHY, 2014-2022(KILOTONS)

TABLE 23 WORLD POLYMER NANOCOMPOSITES MARKET REVENUE, BY APPLICATION, 2014-2022(\$MILLION)

TABLE 24 WORLD POLYMER NANOCOMPOSITES MARKET VOLUME, BY APPLICATION, 2014-2022(KILOTONS)

TABLE 25 WORLD CONSTRUCTION MARKET REVENUE, BY TYPE, 2014-2022(\$MILLION)

TABLE 26 WORLD CONSTRUCTION MARKET VOLUME, BY TYPE, 2014-2022(KILOTONS)

TABLE 27 WORLD AUTOMOTIVE MARKET REVENUE, BY TYPE, 2014-2022(\$MILLION)

TABLE 28 WORLD AUTOMOTIVE MARKET VOLUME, BY TYPE, 2014-2022(KILOTONS)

TABLE 29 WORLD ELECTRICAL & ELECTRONICS MARKET REVENUE, BY TYPE, 2014-2022(\$MILLION)

TABLE 30 WORLD ELECTRICAL & ELECTRONICS MARKET VOLUME, BY TYPE, 2014-2022(KILOTONS)

TABLE 31 WORLD PACKAGING MARKET REVENUE, BY TYPE, 2014-2022(\$MILLION)

TABLE 32 WORLD PACKAGING MARKET VOLUME, BY TYPE, 2014-2022(KILOTONS)

TABLE 33 WORLD OTHER POLYMER NANOCOMPOSITES MARKET REVENUE, BY TYPE, 2014-2022(\$MILLION)

TABLE 34 WORLD OTHER POLYMER NANOCOMPOSITES MARKET VOLUME, BY TYPE, 2014-2022(KILOTONS)

TABLE 35 WORLD POLYMER NANOCOMPOSITES MARKET REVENUE, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 36 WORLD POLYMER NANOCOMPOSITES MARKET VOLUME, BY GEOGRAPHY, 2014-2022 (KILOTONS)

TABLE 37 NORTH AMERICA POLYMER NANOCOMPOSITES MARKET REVENUE, BY TYPE, 2014-2022 (\$MILLION)

TABLE 38 NORTH AMERICA POLYMER NANOCOMPOSITES MARKET VOLUME, BY TYPE, 2015-2022 (KILOTONS)

TABLE 39 EUROPE POLYMER NANOCOMPOSITES MARKET REVENUE, BY TYPE, 2014-2022 (\$MILLION)

TABLE 40 EUROPE POLYMER NANOCOMPOSITES MARKET VOLUME, BY TYPE, 2014-2022 (KILOTONS)

TABLE 41 ASIA-PACIFIC POLYMER NANOCOMPOSITES MARKET REVENUE, BY TYPE, 2014-2022 (\$MILLION)

TABLE 42 ASIA-PACIFIC POLYMER NANOCOMPOSITES MARKET VOLUME, BY TYPE, 2014-2022 (KILO TONS)

TABLE 43 LAMEA POLYMER NANOCOMPOSITES MARKET REVENUE, BY TYPE, 2014-2022 (\$MILLION)

TABLE 44 LAMEA POLYMER NANOCOMPOSITES MARKET VOLUME, BY TYPE, 2014-2022 (KILO TONS)

TABLE 45 NANOPHASE: COMPANY SNAPSHOT

TABLE 46 ARKEMA: COMPANY SNAPSHOT

TABLE 47 ARKEMA: OPERATING SEGMENTS

TABLE 48 DUPONT: COMPANY SNAPSHOT

TABLE 49 DUPONT: OPERATING SEGMENTS

TABLE 50 RTP COMPANY: COMPANY SNAPSHOT

TABLE 51 RTP COMPANY: OPERATING SEGMENTS

TABLE 52 SHOWA DENK CARBON, INC.: COMPANY SNAPSHOT

TABLE 53 SHOWA DENKO CARBON, INC.: OPERATING SEGMENTS

TABLE 54 INFRAMAT - COMPANY SNAPSHOT

TABLE 55 INFRAMAT: OPERATING SEGMENTS

TABLE 56 POWDERMET, INC.: - COMPANY SNAPSHOT

TABLE 57 POWDERMET, INC.: OPERATING SEGMENTS

TABLE 58 EVONIK: COMPANY SNAPSHOT

TABLE 59 EVONIK: OPERATING SEGMENTS

TABLE 60 NANOCOR, INC.: COMPANY SNAPSHOT

TABLE 61 NANOCOR, INC.: OPERATING SEGMENTS

TABLE 62 NANOCYL S.A.: COMPANY SNAPSHOT

TABLE 63 NANOCYL S.A.: OPERATING SEGMENTS

## List Of Figures

### LIST OF FIGURES

FIG. 1 WORLD POLYMER NANOCOMPOSITES MARKET SIZE, 2014-2022 (\$ MILLION)

FIG. 2 WORLD POLYMER NANOCOMPOSITE MARKET SIZE, BY TYPE, 2015 (%)

FIG. 3 WORLD POLYMER NANOCOMPOSITES VOLUME VS. VALUE MARKET SHARE, BY GEOGRAPHY, 2015 (%)

FIG. 4 TOP INVESTMENT POCKETS

FIG. 5 TOP WINNING STRATEGIES, 2012-2016 (%)

FIG. 6 TOP WINNING STRATEGIES, BY KEY COMPANY (2012-2016)

FIG. 7 TOP WINNING STRATEGIES, BY YEAR, 2012-2016

FIG. 8 PATENT ANALYSIS BY YEAR, 2010-2016

FIG. 9 PATENT ANALYSIS BY REGION, 2010-2016 (%)

FIG. 10 PATENT ANALYSIS BY TOP COMPANIES, 2010-2016 (%)

FIG. 11 PORTER'S FIVE FORCES ANALYSIS

FIG. 12 MARKET DYNAMICS IMPACT ANALYSIS, 2015 VS. 2022

FIG. 13 NANOPHASE: REVENUE BY MARKET, 2014 (%)

FIG. 14 ARKEMA: REVENUE BY BUSINESS SEGMENTS, 2015 (%)

FIG. 15 ARKEMA: REVENUE BY GEOGRAPHY, 2015 (%)

FIG. 16 DUPONT: REVENUE BY BUSINESS SEGMENTS, 2015 (%)

FIG. 17 DUPONT: REVENUE BY GEOGRAPHY, 2015 (%)

FIG. 18 EVONIK: REVENUE SHARE, BY BUSINESS SEGMENTS, 2015 (%)

FIG. 19 EVONIK: REVENUE SHARE, BY GEOGRAPHY, 2015 (%)

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