

Hydrophobic Coatings and Surfaces: 2016-2023

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Abstracts

In this report we identify the opportunities that are emerging from the latest developments in hydrophobic materials and surfaces. These include important new materials based on carbon nanotubes, graphene, nanoparticulate calcium carbonate and various nanocomposites, which are slated to create a new breed of “superhydrophobic” products. The report also covers the latest developments from more conventional silicon-based hydrophobic materials as well as novel patterning approaches to creating hydrophobic surfaces.

Hydrophobic coatings have been available for decades and virtually every major specialty chemical company has a range of such coatings in their product catalogs. Until recently, these coatings have been treated as semi-commodities. What n-tech is seeing, however, is a new emphasis on hydrophobic materials reflecting (1) the technological developments mentioned above and (2) the growing need for high-performance hydrophobics in the marketplace.

This report also analyzes how revenue generation potential in the hydrophobic material space is changing. In this analysis, the focus is on self-cleaning, anti-corrosion and de-icing, but we also examine the commercial applications for the closely related oleophobic and omniphobic materials.

In putting together this report n-tech has drawn on its extensive experience in the smart materials space as well as interviews with key companies shaping these markets. n-tech believes that this report will provide valuable insight into hydrophobic materials markets that will benefit marketing and business development executives from various parts of the supply chain, including raw material suppliers, chemical and coatings companies, glass companies, OEMs, as well as investors with an interest in the smart materials business.

Applications and Markets

This report provides identifies the applications areas where n-tech believes hydrophobic materials and surfaces have a real opportunity to move beyond the lab to high-volume commercial applications. Applications covered in this report include:

Automotive

Aerospace

Marine

Construction

Solar and wind

Textiles

Consumer electronics

Food processing

Medical

Water treatment

Eight-Year Forecasts for Hydrophobic Materials

This report contains detailed forecasts of volume (in square meters and units) and revenue (in \$ millions), broken down by:

End application

Type of material

Fabrication method

Profiles of Key Players

This report evaluates the product/market strategies of the leading suppliers in the hydrophobic space. Firms that are discussed in this report include

3M

Akzo Nobel

Alcoa

Balcony Systems

BASF

BP

Clariant

Corning

Dow Chemical

DuPont

Evonik

ICM

Innventia

Joma

Jotun

Liquidoff

MMT Textiles

nanoShell

NeverWet

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