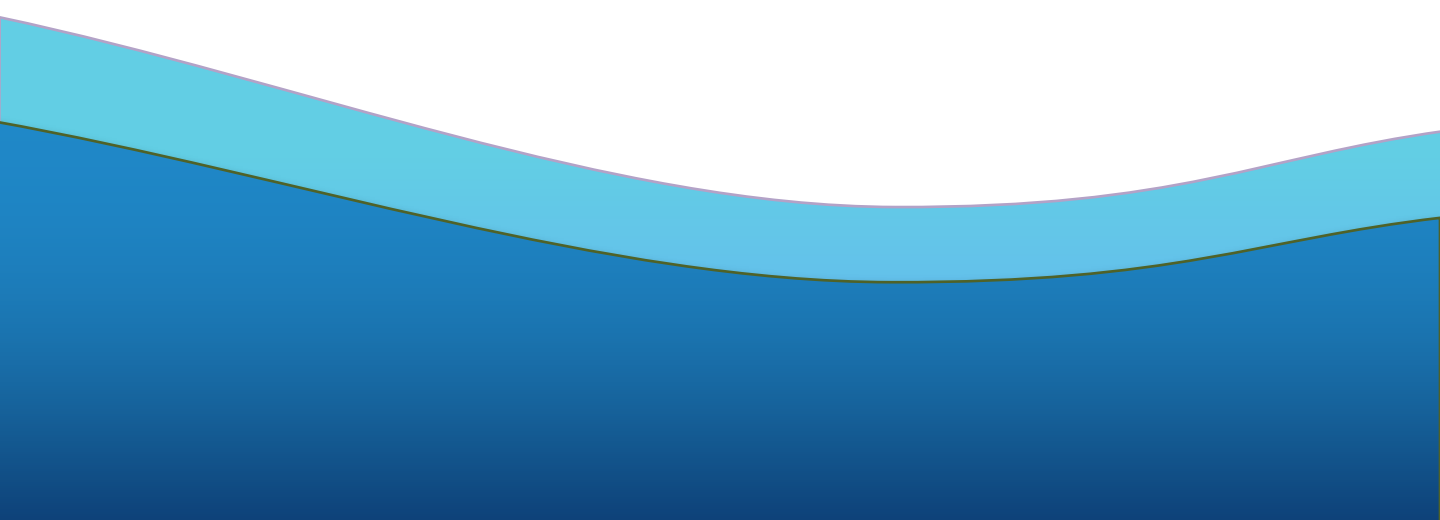
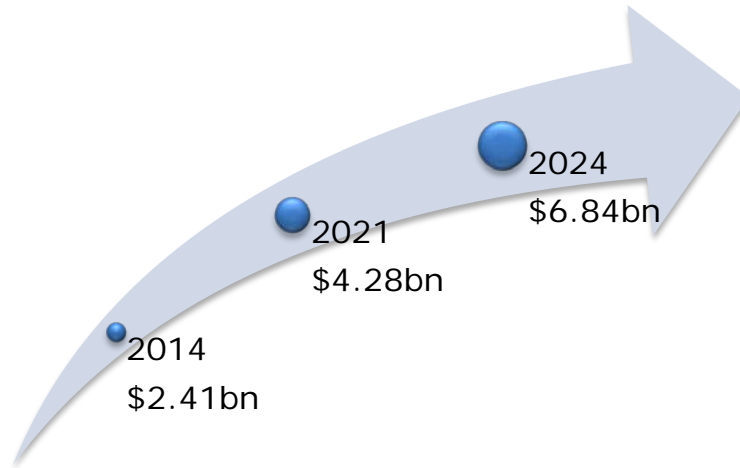


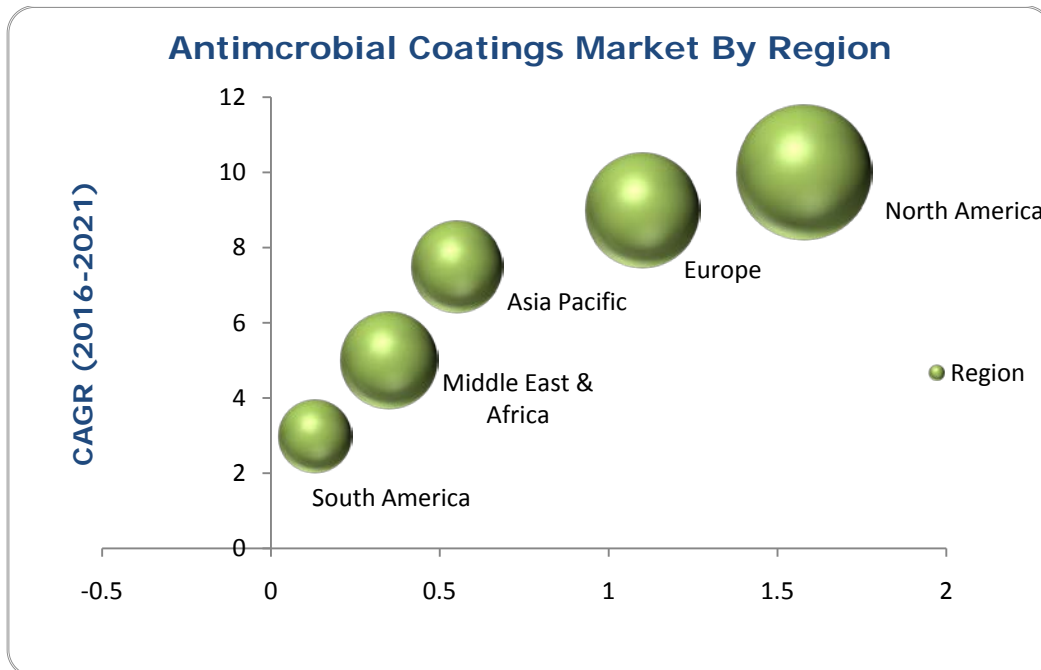
***Growth Potential-
Antimicrobial Coatings
Market***



Market Forecast - Global Antimicrobial Coatings



Anti-microbial coatings are applied to prevent the growth of bacteria, virus and other pathogens on various surfaces, thus protecting humans from harmful pathogens. Healthcare and food processing industries are the major end-users of anti-microbial coatings. Increasing number of food-poisoning cases and infections acquired from hospitals is increasing the usage of anti-microbial coatings in healthcare and food-processing industries. Healthcare industry has witnessed maximum usage of antimicrobial coatings, majorly on surgical devices as it helps to inhibit the spread of germs and bacteria among patients, doctors and caretakers. Other end-user segments include Textiles, Building & Construction and Marine Industry.



The market has also been geographically segmented into Asia-Pacific (China, India, Japan, South Korea, rest of Asia-Pacific), North America (United States, Canada, Mexico, rest of North America), Europe (Germany, United Kingdom, France, Italy, Nordic Countries, rest of Europe), South America (Brazil, Argentina, rest of South America) and Middle-East & Africa

(Saudi Arabia, South Africa, Qatar, rest of Middle-East & Africa). In terms of consumption in 2016, Europe and North America lead the market. This can be attributed to awareness about anti-microbial coatings and increased spending on healthcare in the developed nations like the United States, Canada, the United Kingdom, Germany, France etc.

Increasing demand from residential and commercial construction projects to minimize indoor air pollution will facilitate industry growth. Preserving indoor air quality for prolonged duration is among the key property to enhance product penetration in this segment. Food & beverages industry expansion, particularly in the U.S., Germany, UK, and China will support industry growth. Stringent regulations along with the need to enhance product shelf life & prevention during transportation along with technological advancements due to increased R&D, merger and collaborations between leading players and funding environment for innovations are the key driving factors.

The market is expected to be driven in developing countries such as China and India due to increasing consumer affordability. The increasing spending on healthcare is a healthy sign for the anti-microbial coatings market. However, developing and under-developed regions of South America, Asia and Africa lack awareness on anti-microbial coatings, which is restraining this market.



The anti-microbial coatings market is further divided based on the material used in these coatings. These segments are silver, copper, organic, polymeric and others (includes Zinc-Oxide, Zirconium, Titanium dioxide and Zinc Omadine). Silver-based anti-microbial coatings are widely used and are expected to witness considerable growth rate during the forecast period.

The research and development (R&D) budget of paints and coatings companies has been steadily increasing over the past few years. This can be attributed to the patent cliff that had started around 2010 and is expected to continue until the end of the present decade and to the early years of the next decade. In the United States and Europe, paints and coatings companies spend more in R&D than any other region. In the past four to five years, there has been a progressive trend in the R&D expenditure in the United States and Europe.

Fluctuations in raw material prices, rising competition from local players and strict environmental regulations in regional markets for the use of antimicrobial products that contain harmful chemicals are some of the challenges that may restrain the growth of this market.

Major companies profiled in this market include AkzoNobel, BASF, Sherwin-Williams, PPG Industries, Dow Chemicals, Lonza Group Ltd., Troy Corporation, Royal DSM, Cytec Solvay Group, etc. among others. These companies are undertaking extensive R&D activities to develop better, efficient and novel products. Startups with a major focus on innovation have also sprung up in this market in the recent years. These companies are planning to enter the paints and coatings market with major focus on developing innovative products. For example, an Irish start-up, Kastus, has developed a range of anti-microbial surface treatments that can be used to coat glass and ceramics, as well as be added to plastics and paint.

To summarize, the global antimicrobial coatings market is a growing one with numerous opportunities offered by various regions of the world particularly North America and Europe. Asia pacific is an emerging market and is likely to witness a growth rate of 9% by 2024. Latin American countries and other underdeveloped regions of the world lack awareness on these coatings and are thus likely to project a low growth rate in the years to come