

Global Markets for Conformal Coatings in Electronics

Market Research Report | 2022-12-14 | 212 pages | BCC Research

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Report description:

Description

Report Scope:

The scope of the report includes a detailed study of global and regional markets for various types of conformal coatings and coating equipment and the reasons for variations in industry growth by region. Definitive and detailed estimates and forecasts of the global market are provided, followed by a detailed analysis of the regions and end uses. Furthermore, the ongoing market trends, market growth drivers, and challenges impeding the market are discussed.

Market size and estimations will be provided in terms of volume and revenue considering 2021 as the base year. Market forecasts will be given from 2022-2027. The market size for different regions (material type by region, applications, and end use) will also be covered. The impact of COVID-19 was also considered when deriving market estimations.

Global markets, conformal coatings, coating equipment segments, and growth forecasts through 2027 are offered. Sales value estimates are based on prices in the supply chain. Market-driving forces and industry structure are examined. International aspects are analyzed for all global regions and profiles of major global manufacturers are presented.

This report considers the impact of COVID-19. In 2020, the growth rate of manufacturing industries around the world was severely affected by the pandemic. The COVID-19 pandemic halted progress in every regional economy. Various governments around the world are taking measures to contain the economic slowdown.

Report Includes:

- 45 data tables and 37 additional tables

- A brief general outlook and up-to-date analysis of the global markets for conformal coatings and coating equipment in electronics industry applications

- Analyses of the global market trends, with market revenue data for 2021, estimates for 2022 and 2023, and projections of compound annual growth rates (CAGRs) through 2027

- Estimation of the actual market size in value and volumetric terms, revenue forecast in USD millions, and corresponding market share analysis by material type, technology, application, and region

- In-depth assessment of the market drivers and opportunities for conformal coating materials, equipment and spares, key shifts and regulations, industry specific challenges, and other macroeconomic factors influencing the market demand in the coming years (2022-2027)

- A look at the increased demand for conformal coatings driven by customers' expectations in diverse areas such as performance, ease of application, sustainability, quality, functionality, and environmental properties

- Coverage of new technologies, R&D progress, market forecast and recent activities in the paints and coatings industry

- Updated information on key mergers, acquisitions and other business relations in the global market for conformal coatings and coating equipment in electronics industry applications

- Company profiles of major players within the industry, including Daikin Industries, Dow Inc., Henkel AG & Co. KGaA, and Shin-Etsu Chemical Co., Ltd.

Executive Summary

Summary:

A conformal coating is a thin polymeric film applied to printed circuit board (PCB) assemblies to protect the board and its components from the environment and corrosion. The film is typically applied at 25- 250 micrometers and "conforms" to the shape of the board and its components, covering and protecting solder joints, the leads of electronic components, exposed traces, and other metalized areas from (gaseous) corrosion, ultimately extending the working life of the PCB. The conformal coating can also refer to thin films that are <1 micrometer thick and perform the same function.

The use of conformal coatings is particularly important in high-reliability electronics applications, such as automotive, military, aerospace, medical, marine, lighting, industrial, and green energy applications. However, due to the rapid expansion of the electronics industry, conformal coatings are also finding their way into the domestic and mobile electronics industries, providing the necessary combination of high performance and reliability within a vast array of electronic devices. Further, the emerging device as a service (DaaS) business model requires extended reliability and lifetimes from the electronics and will greatly benefit from the utilization of suitable conformal coatings.

The Asia-Pacific region is anticipated to be the largest market for the global conformal coatings market in the coming years due to the significant sales of electronics, semiconductors, and medical equipment. The COVID-19 pandemic wreaked havoc on the global industrial sector. Market development has been impeded by a lack of demand and a large demand-supply mismatch. Furthermore, the global delay of industrial growth projects, particularly in the aerospace, automotive, construction, and oil and gas sectors due to national lockdowns, will reduce conformal coatings production capacity. Due to COVID- 19, several developing nations are on the verge of bankruptcy. However, in the post-pandemic era, global conformal coatings market manufacturers anticipate an increase in product demand.

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