

No Need to Sacrifice Performance When Formulating Sustainable Wood Coatings with High-Performance Catalysts

Abstract:

Wood is the main renewable substrate for coatings in many market segments. However, if left untreated, wood can become brittle over time, which leads to cracking, discoloration, and other signs of wear. To ensure proper protection, products such as alkyds and oils are commonly used in wood coatings. Because of their ability to penetrate deep into the wood structure, these solutions help preserve the material and extend its service life. If the right catalyst is selected for these formulations, it is possible to further improve chemical and water resistance. Following the market trend moving into 100% solids, more sustainable oils, this presentation will address how Borchers' novel high-performance catalyst technology can enhance the performance of wood coatings, focusing on the most popular 100% solids linseed oils available in the market, as well as alkyd emulsions and wood stain products. The presented data will highlight how common issues such as wrinkling in high solids, low-VOC thick films can be resolved. Furthermore, it will feature formulations that provide improved drying performance and color compared to coatings with conventional manganese and cobalt driers.

Speaker Bio:

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Dietmar Helker is a technical service chemist and the co-supplier manager for Borchers GmbH in Langenfeld, Germany. He manages and leads all technical activities for Borchers: A Milliken Brand coating additives with resin and pigment suppliers for the coatings, inks, and adhesives industries. He has worked with Borchers coating additives for many years, previously serving as an R&D chemist, technical service manager, head of rheology, and technical sales representative. Other roles include chemist positions for J.W. Ostendorf (Hempel) and Stockmeier Urethanes as well as a sales manager for Biesterfeld Spezialchemie GmbH. Dietmar has received extensive training as a chemical laboratory technician along with a Bachelor Professional (CCI) of Chemical Technology and Operations.