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European Coatings Show (ECS) 2023

Title:

A PTFE-free World – Solutions for Coatings and Inks

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Abstract:

Low molecular weight polytetrafluoroethylene (PTFE) in the form of micronized powders have brought desirable properties for coating and ink applications including excellent mechanical properties, chemical resistance, and low coefficient of friction. However, producing low molecular weight PTFE via irradiation process generates perfluorooctanoic acid (PFOA), which can exceed concentrations restricted by 2019 Stockholm Convention that limit PFOA formulation with more than 25 parts per billion (ppb).

In this presentation, we present new technology that serves as a viable alternative to PTFE. These PTFE-free formulations deliver similar properties to PTFE-containing formulations in various applications. The advantages of the halogen free additives are characterized by good compatibility in inks and coatings and due to their low density as compared to PTFE, are easier to disperse and process.