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## **THE MODERN ART OF COATING WITH UVC HMPSA - FORMULATING AND FINE-TUNING UVC-CURABLE ACRYLIC HMPSA COATINGS**

UVC-curable acrylic hotmelt pressure sensitive adhesives (UVC HMPSA) are an adhesive class among solvent-borne, water-based and rubber-based adhesives for self-adhesive labels, tapes and films. One of the many known benefits of using this type of adhesive are its covalently anchored photoinitiators to achieve tailor-made adhesive properties after curing. Over the years, new developments of polymers have led to enhanced properties and a broader application range.

However, this adhesive class can be taken to the next level by formulating the polymers to perfectly fine-tuned products and therefore, upgrading their performance. These formulations result in an almost unlimited number of new adhesives with various properties, which can be optimized for the coating process.

In the last years of in-house developments on formulated UVC HMPSA at EUKALIN Spezial-Klebstoff Fabrik GmbH we studied the different aspects of the coating process. It was shown that these play an important role to discover new properties and to identify adhesives for special applications like wash-off and reclosable labels.

Depending on the formulation of UVC HMPSA, parameters like UVC dose, grammage, materials, temperature and several more need to be considered and chosen according to the given requirements. Changing one of those parameters can lead to a different behavior of the adhesive or the coating and is the key to a perfect solution for successful customer applications.

Consequently, formulating these polymers and fine-tuning the coating process to achieve the required properties are crucial for each application and should be validated for every single case.

In the end, why is the coating of UVC HMPSA a kind of modern art?

Find out more at the 46th Munich Adhesives and Finishing Symposium during this presentation about the interaction of the different parameters and what we can achieve together with these special adhesives.