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## **TACKIFIER RESINS IN UV-CURABLE PSA TAPES: SELECTIVE TACKIFIER USE FOR PERFORMANCE AND EFFICIENT CURING**

### **ABSTRACT**

UV-curing adhesives offer fast processing, low energy demand, solvent-free formulation options, and precise process control, making them attractive for pressure-sensitive adhesive tape applications.

Formulating UV-curable PSAs requires careful resin selection. While aromatic tackifiers are widely used in conventional adhesive systems, their UV absorption can interfere with photoinitiator efficiency and limit cure depth. However, selected aromatic hydrocarbon resins with suitable optical, structural, and molecular characteristics can be successfully incorporated into UV-curable PSA formulations.

This presentation focuses on PSA tape applications and examines how aromatic hydrocarbon tackifiers can be used selectively to improve tack, control viscosity, and enhance adhesion while maintaining sufficient UV transparency for efficient curing. Key selection criteria, including UV transmission, compatibility with UV-reactive components, molecular weight, and formulation balance, are discussed to provide practical guidance for effective use in UV-curable adhesive systems.