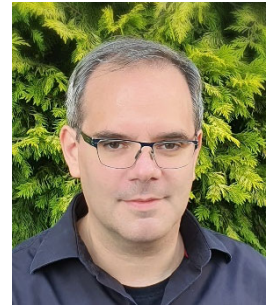


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## **FLAME RETARDANT PRESSURE SENSITIVE ADHESIVES BASED ON ETHYLENE – VINYL ACETATE COPOLYMERS**

Ethylene vinyl acetate copolymers with vinyl acetate (VA) contents above 40 wt.-% (EVM) are in contrast to their low VA-analogs elastic materials. Due to their outstanding properties, they are widespread used in various applications like rubber goods, plastic modification or adhesives. Especially when it comes to applications where flame retardancy is paramount this unique class of polymers is indispensable. By incorporating flame retardants into EVM formulations, manufacturers can produce materials that resist ignition, slow down flame spread, and show reduced smoke and gas toxicities in case of fire incidents. EVM also serve as a base material for pressure-sensitive adhesives (PSAs), where they provide an ideal balance of tackiness, flexibility, and durability. In EV battery applications, flame retardant PSAs are tremendously important for various components, including battery packs, battery modules, and thermal management systems. In this presentation, we explore the remarkable synergy achieved by combining the flame retardancy properties of ethylene - vinyl acetate copolymers with their inherent characteristics as pressure-sensitive adhesives (PSAs). By means of a basic formulation adhesive property of an EVM based PSA will be discussed. Furthermore, it will be shown how this formulation can be transferred into a highly flame-retardant PSA formulation without compromising adhesive properties.