

COATED ABRASIVES

Backing impregnation Replacement of melamine resin

SUCCESS STORY



STARTING POINT & CHALLENGE

Some coated abrasive manufacturers use melamine resins, due to its toughness and water resistance, to impregnate backing materials (paper, cotton, PES, or PET). But these melamine resins tend to be more expensive. A more economical solution provides the use of phenolic resins. One challenge, however, is that conventional phenolic resins can cause cotton to swell or lead to embrittlement of PES or PET.

SOLUTION

ASK Chemicals has developed a phenolic resin REZIANCE SSA-1299 that addresses all these challenges of replacing melamine resins, while also preventing swelling and embrittlement of the backing substrate. For in-line curing tunnels, a faster cure version REZIANCE SSA-1299FC is also available. Furthermore, these resins have excellent compatibility with rubber latex and impart good flexibility to the backing material.

TECHNICAL PROFILE

Grade	REZIANCE SSA-1299	REZIANCE SSA-1299FC
Viscosity (CP)	800-1200	500-1000
Solids (%)	48-52	65-70
Water tol. (%)	SOLUBLE	>1500
PH	9.5 – 10.5	9.5 – 10.5

BENEFITS AT A GLANCE

Technological

- No need for thickener in the mix because the resin shows a thickening effect with acrylic latex.
- No need for plasticizer in the mix because the resin is inherently flexible.

Total cost of ownership

- Phenolic resin at lower costs than melamine resin
- No thickener costs
- No plasticiser costs

