Pigment coatings are applied onto paper and paperboard to improve their appearance and printability. For pigmented coatings, pigments and binders are the most important ingredients so their selections are critical. Pigment binders not only perform the basic required role of binding pigment particles to each other and bonding the base sheet, but also significantly influence the rheology, coater runnability, and drying behaviors of the coating formulation and the optical, viscoelastic, and printing properties of coated paper and paperboard products.

When considering the relative amount of binders to use in a coating, one may speak about main binder, co-binder and sole-binder. By sole-binder it is meant that a single binder alone can perform all the desired functions of the binder in a coating. Usually the binder systems consist of a combination of two binders, in which the main binder is responsible for the binding function. This study examines how biobased latex, as a co-binder, affects the rheology and water retention properties of coating colors and also examines the incorporation of an amine functional polyvinyl alcohol polymer as a sole-binder for ink-jet coating in absence of cationic additives.