Abstract

Title: Improved Dispersion of Organic Pigments in Polyesters and Final Product Physicals, without Impacting Printing and Label Adhesion.

Author: Frank Neuber

Technical Business Development Manager Clariant Corporation – Adsorbents and Additives BU

Abstract: Organic pigments are notorious for agglomerating and negatively impacting both the color development and physical integrity of PET articles, such as strapping, films and blown bottles. Typically, EBS or PETS wax are used during masterbatching or compounding to augment organic pigment separation and reduce their re-agglomeration. Of course, these additives also typically improve mold release and de-nesting too. These additives however may eventually show excess exusion and affect label adhesion or printing. Clariant's data and client feedback show that higher molecular weight ester waxes, which are derived from fully sustainable sources, such as naturally derived rice bran wax, offer a superior path to improving the organic pigment dispersion, with much less exusion than typically seen from EBS or PETS wax. Thus, printing is improved and labels adhere better, while the article has better physical integrity. The improved dispersion also provides a positive economic influence, as less of the expensive organic pigments may [now] be used to color the same article.