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Beyond Color- Harnessing Functional Pigment for Additional Properties

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Abstract:

When selecting a pigment, most of the focus is, rightfully so, on which pigment achieves the correct color. There are other factors such as heat stability, resin suitability, weatherfastness or food contact certification that may also contribute to the selection of certain pigments, but the function of a pigment is to provide color. What about when they provide an extra function beyond just color. Functional pigments not only provide a color but also have properties that can be harnessed to extract additional performance from formulated plastic materials. Some of those additional properties reduce the buildup of heat on the surface, allow for sorting of plastics in recycling or enable autonomous vehicles to monitor its surroundings. This paper will investigate some of these applications and the functional pigments that support them.