BonuPrint®, a Natural Printing Ink for Food and Nutraceutical Industries

**Introduction**

Color in food is an important issue, since it has an impact on the perception of freshness or deliciousness. The color of food packaging is a great indicator for the quality of the product inside the package. For a product's quality, we look at the packaging; from a consumer's point of view, colors can be a valuable indicator. This means that manufacturers are interested in improving consumer trust and satisfaction, which may lead to an increase in sales. As a result, manufacturers are constantly looking for new natural colorants that can replace synthetic pigments.

**NATURAL PIGMENTS AND BP**

The availability of different food-grade natural pigments is reviewed. The challenge was to establish a methodology that was suitable for evaluation of approved natural colors. The results of the natural pigments were also evaluated and compared with the results obtained from the standard samples.

**LIGHT STABILITY**

The stability of BP yellow and BP green against the light stability of the standard BP yellow and BP green was evaluated. The results showed that the BP yellow and BP green were stable against various light sources.

**HEAT RESISTANCE**

The heat resistance of BP yellow and BP green was tested. The results showed that the BP yellow and BP green were stable against heat.

**THERMAL STABILITY**

The thermal stability of BP yellow and BP green was evaluated. The results showed that the BP yellow and BP green were stable against high temperatures.

**Chemicals and Methods**

Different mixtures of vegetable oil and water based 5% were tested with natural pigments. The composition of the mixture was modified in order to study the effect of different components on the properties of the BP. The results showed that the BP yellow and BP green were stable against various light sources.

**Applications**

BonuPrint® is used as a ink for printing tablets, nutraceutical fields, and in the food industry. The results showed that the BP yellow and BP green were stable against heat and light.

**Conclusion**

The developed water based and solvent based BP with natural pigments are suitable for printing tablets. The BP yellow and BP green are stable against various light sources. The viscosity of both BPs is reduced due to addition of thinner solution. The intermolecular force is influenced by the addition of the thinner solution. The intermolecular force of the BP yellow and BP green was measured at each dilution level. The results showed that the BP yellow and BP green were stable against heat and light.

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