A Brief Overview of Special Effect Pigments

The demand for brand and product differentiation has led product designers to use increasing amounts of special effect pigments as a solution. Bead Brite has responded to this market demand by introducing a series of unique appearance and performance effect materials known as Helicone and Chrom Brite CB4000 / CB4500.

More than two decades of innovation have given formulators access to an extremely broad range of specialty finishes based upon special effect pigments and additives, including:

MATTE – Usually a mono-coat system with a very low level gloss. Can be textured or Flat.

TEXTURES – A finish which can be either a mono- or multi-coat system with a variety of hammertone, speckle, granite, crackle, pepple or veins. Can be high gloss, however due to the inherent surface irregularities, these are usually somewhat matte. They are usually used in conjunction with specialty coating additives.

METALLICS – Coatings containing predominantly aluminum flake. Can be formulated in combination with special effect pigments of various particle sizes to give either a satin or specular finish. The surface can be matte or of a high gloss

MARBLIZED – Special coating additives in combination with effect pigments that cause swirling effects similar to polished marble. Can also be accomplished with incompatible resin combinations.

JEWEL TONE – Usually a two coat system comprised of a dark, colored, basecoat containing an effect pigment in combination with various organic pigments. It is followed by application of an untinted clearcoat to create a deep, rich, satin or sparkling color effect at 45 degrees viewing angle only. These coatings simulate precious gems such as rubies, sapphires, garnets and emeralds.

TRI-COAT – A multi-coat system in either a light, or medium value, usually comprised of a solid base coat formulated with inorganic and organic pigments, a transparent mid-coat containing special effect pigments followed by application of a non-tinted clear coat.

CANDY – A solid, metallic or effect pigment base coat in combination with a transparent colored clear coat, followed by a non-tinted clear. The clear may be tinted with either small amounts of transparent organic pigments or dyes resulting in a deep, high chroma color.

OPTICALLY VARIABLE – Special optically variable effect pigments used in combination with absorption pigments that provide a pronounced multi-colored effect as the angle of viewing changes. Can be matte or of a high gloss in all color values. Usually applied in either a two or three coat system.

OPALESCENT – An optically variable coating containing two or more optically variable effect pigments over a colored base coat. Simulates the effect seen with black, fire or white opals. Can be formulated in dark or light values.

There are obviously many variations on each of these coating systems, including the use of large particle size materials that give a high glitter or sparkle effect. Therefore, the product development specialist, color designer and specifier have now, more than ever, a wide variety of special effect raw materials from which to choose.