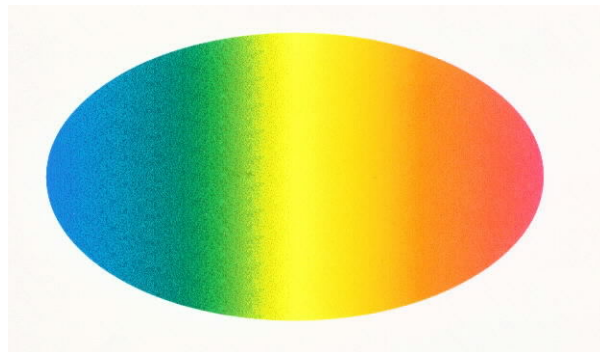


Bead Brite Research

*Technical Bulletin
And
Starting Formulations*

*Creating Custom Effect Finishes With
Bead Brite Additives
In
Water Clear Coat*



About “Bead Brite” Additives and Optical Enhancers

In the current style environment, where there is an emphasis to generate more cost effective coatings in combination with the desire to recycle materials where possible, Bead Brite has introduced to the market place a series of optical enhancers and pigment additives. These materials when formulated into coatings not only give unique color and appearance effects, but also lower overall raw material contribution costs. In addition, the recycled glass and rubber products are qualified under the United States Federal Executive Order for Recycling and may qualify for federal tax credits.

The formulator can look upon the glass substrate Bead Brite additives as dependency enhancers to both current metallic and special effect pigments (such as Helicone) for the creation of a soft glow, unlike the expected metallic sparkle. Such tools allow the formulator to engineer unique physical properties as well as unique appearance into existing formulations. The various Bead Brite additives when used in coatings can significantly improve physical properties such as **mar resistance** or **pattern control**, or they can **impart tactile** properties, **improve heat transfer** or **provide heat resistance**. Through new particle engineering processing, we are now able to provide unique geometries for glass and rubber particles that create many new and aesthetically pleasing effects. Additional research has indicated there are other naturally occurring materials, which can expand this formulating space, and Bead Brite continues to evaluate these for incorporation into Bead Brite additives line.

BEAD BRITE – CHROM BRITE

CB4000 1-13 um

CB4500 1-45 um

CB100 1-100um

- Mirrorized recycled random geometry glass chips, which provide reflectivity, and opacity when formulated into coatings.
- Incorporation allows for improved spot repairability of the cured film.
- Can be used alone or in combination with **Helicone** pigments, **aluminum** or other **special effect pigments** to improve the visual appearance by geometric diffusion and magnification of more costly effect pigments. Also **impart brilliance, depth of image, UV screening capability, color travel and pattern control**.
- Range of available particle sizes allows flexibility in the degree of brilliance and sparkle in the finished formulation. CB4000 1-13um, CB4500 1-45um and CB100 1-100um.
- **Compatible in water borne coatings.**
- Lower overall raw material cost contribution and VOC's.
- **Require high-speed dispersion** to be properly incorporated into the vehicle system.

WATER CLEAR COAT

BY WEIGHT

15% - CB4000 (1-13um)

10% - CB4500 (1-45um)

5% - CB100 (1-100um)