Boron Nitride Powders for Color Cosmetics
and Skin Care

Achieving the perfect balance in the way a cosmetic product affects our senses, flows through a process and costs, are the formulator’s challenge. TRÈS BN powders work in synergy with many other materials to achieve this balance. Whether it’s the shimmer of an eye shadow, the coverage in a foundation, or higher yield in the extrusion process, TRÈS BN® powders offer formulators many solutions wrapped into one material.

WHAT IS TRÈS BN?

Hexagonal boron nitride (hBN) is a synthesis of Borax (natural mineral) and a Nitrogen source at high temperature resulting in a lamellar structure that resembles graphite, except pure hBN is white. TRÈS BN Cosmetic Powders are Ultra-High Purity (UHP) versions of this lamellar form with each layer or cleavage face containing boron and nitrogen. There is no B-N bonding between layers and therefore planes slide over one another, creating a soft and lubricating effect.

A BEAUTIFUL ALTERNATIVE

Each TRÈS BN grade has unique properties that are associated with crystal size, morphology, and surface characteristics. Crystalline platelets, from 2 to 30 microns, each grade within this range has a different appearance from matte to shiny, but all are soft, smooth and adherent. TRÈS BN powders may be used as a major stand alone component in pressed and loose powders, or as minor additive to any formulation for improved texture, enhanced luminosity, decreased tack and increased pick-up and play-time in skin creams. In formulations where talc, mica or bismuthoxychloride are undesirable or fall short on performance, TRÈS BN powders offer a perfect alternative.

Features/Benefits

- Lamellar crystal structure
- Transparent through basal plane
- Density 2.26 g/cc
- Chemically inert and stable
- Refractive Index 1.74
- Thermally Conductive
- Low Coefficient of Friction < 0.3

Key Applications

- Foundation and liquid makeup
- Concealers, BB Cream
- Loose and pressed powder
- Lipstick
- Pencils
- Nail enamel
- Sunscreen and moisturizers

Target Markets

- Color cosmetics
- Skin care and personal care
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