

HITOX[®]

The Unique Color Pigment

TiO₂ does not have to be pure white - or expensive

HITOX[®] (high grade titanium dioxide), a buff-colored rutile titanium dioxide (TiO₂) is designed for use in tinted coatings, paints, plastics and many other products. TiO₂ is the primary pigment used to impart opacity, durability, gloss and brightness. Products incorporating TiO₂ include all types of paints, primers, automotive, appliance, and other finishes, PVC pipe, plastics, paper and inks. Most titanium dioxide is pure white, but HITOX demonstrates that whiteness is not a prerequisite for effectiveness in color formulations. As a unique color pigment, HITOX is used in almost all colors of the spectrum offering performance and cost effectiveness.

HITOX[®] TiO₂ versus white TiO₂ in colored products

HITOX [®] TiO ₂	White TiO ₂
◆ In colored products, offers comparable performance characteristics to white TiO ₂ : opacity, consistency and color quality	◆ Standard pigment for use in white products
◆ Lower cost, 95% rutile TiO ₂	◆ Expensive prime pigment
◆ Light buff color allows reduction of expensive tinting pigments	◆ In colors, resulting whiteness must be “overcome” by tinting with expensive additional pigments
◆ Reduction of expensive pigments provides greater cost effectiveness	◆ Additional pigments add cost to finished product

How is HITOX[®] used?

In products which require opacity and color but which do not have to be pure white, HITOX can reduce the amount of expensive color pigments that must be used, as well as economical replacement of part of the white TiO₂. Depending on the finished color desired, HITOX can replace from 15 to 100 percent of the white TiO₂ and may also allow the reduction of phthalo blues and greens, hansa yellows, organic oranges, and other color pigments achieving considerable savings. HITOX is chemically inert and is approved by the NSF and FDA.

Applications for HITOX[®]

Some examples of coatings applications in which HITOX is used widely and successfully are architectural paints, traffic marking paints, automotive and maintenance primers, and coatings for appliances and office furniture. Coatings systems that may incorporate HITOX include alkyds, acrylic urethanes, high solids systems, water reducibles, water bases, powder coatings, and others.

Plastics uses include most colors of PVC pipe and conduit, vinyl siding, floor tiles, color concentrates, and plastic film.

HITOX is also used in inks, adhesives, paper, roofing products, and other building materials.

HITOX[®] SAVES MONEY

HITOX TiO₂ offers a two-fold cost savings by: first, substituting or partially replacing the expensive standard white TiO₂ and secondly, often more significantly, the reduction of the more expensive colored pigments (organic and inorganic colored pigments).

The graph below demonstrates the two fold cost savings achieved by incorporating HITOX TiO₂ in a blue coating system. Due to HITOX's unique special reflectance and absorbance in the visible spectrum of light (400-700 nanometers), you do not have to travel as much of the distance in the color space to achieve the blue color match as a formulation containing only white TiO₂. By not having to overcome all of the whiteness of standard white TiO₂ and incorporating 40% HITOX it is possible to reduce the percentage in your expensive inorganic/organic colorants while still maintaining the same color and opacity.

COST SAVINGS OF HITOX IN BLUE PAINT

