IRIDESIUM 3725

Bronze Powder Substitution!

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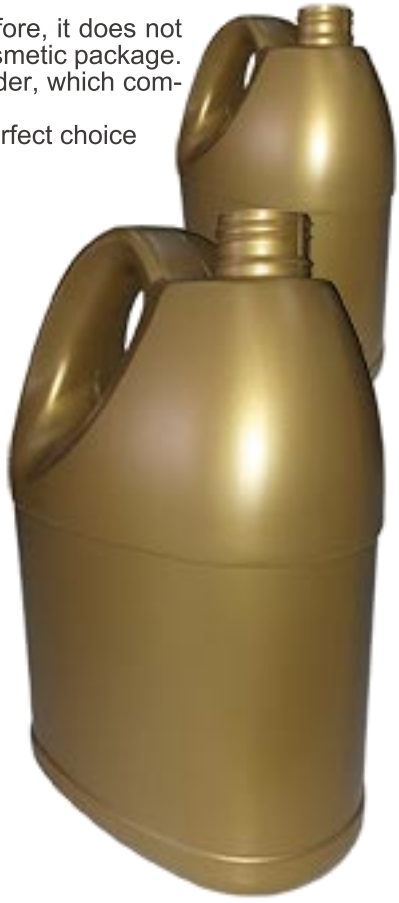
Parameters

Physical Form	Gold Dry powder
Particle Size Range	5-25μm
Density	2.8-3.4 g/cm3
Bulk Density	32-45 g/100ml
PH 10% Aqueous Slurry	7-11
Solubility in Water	Not Soluble
Oil Absorption	60-85g/100 g
Heat Resistance	≤ 300°C

Product Development Background & Application Scenarios:



1. Bronze Powder is a copper-zinc alloy, and copper is a listed heavy metal. Therefore, it does not meet the International Regulations of cosmetics, personal care, toys, food and cosmetic package. The end users have desperate demands of a similar color shade for Bronze Powder, which complies with Heavy Metal International Regulations.
   Bronze Powder substitution has almost no heavy metal concentration. It is a perfect choice for all applications which are sensitive to heavy metal concentration.

2. Bronze Powder is a copper-zinc alloy. Zinc is a very active element; it can easily have a chemical reaction with oxygen and humidity. As a result, Bronze Powder always has a reaction in water-borne systems: the color of the final product changes or even turns black. The end users urgently need a product with a similar color shade which doesn't change color in water-borne systems.
   Bronze Powder substitution fundamentally solves this problem: pearl pigments are an extremely stable inorganic mineral, it has absolutely no chemical reaction in a water-borne system.

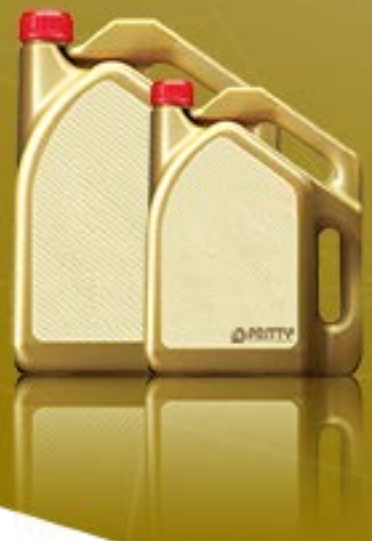
3. The density of Bronze Powder is 8.5g/cm³. The higher density makes Bronze Powder settle faster in the binder. Even worse it agglomerates after sedimentation and is very difficult to stir up. This seriously jeopardizes the shelf time of the final products. The end users desperately need products to solve the settling problem.
   Bronze Powder Substitution's density is 2.8g/cm³. It settles remarkably slower. Even after sedimentation, it is easy to stir up and will not affect the effect of the final products. It perfectly solves the sedimentation problem of Bronze Powder.

4. Bronze Powder is the alloy of copper and zinc. The temperature resistance is 180-200℃; therefore, it has serious limits in applications requiring higher temperature, such as cookware, ceramics, tiles and plastics (PA, PET, PBT and PC).
   Bronze Powder Substitution is calcinated under temperature of 600℃ during the manufacturing process. The final product can stand a temperature up to 300℃.

5. The color shade of Bronze Powder Substitution is close to Bronze Powder, but the metallic effect and hiding power is less. However, when the substitution can solve any of the Bronze Powder issues of heavy metal concentration, color changing, or sedimentation, the end users are willing to accept the limit.

Features

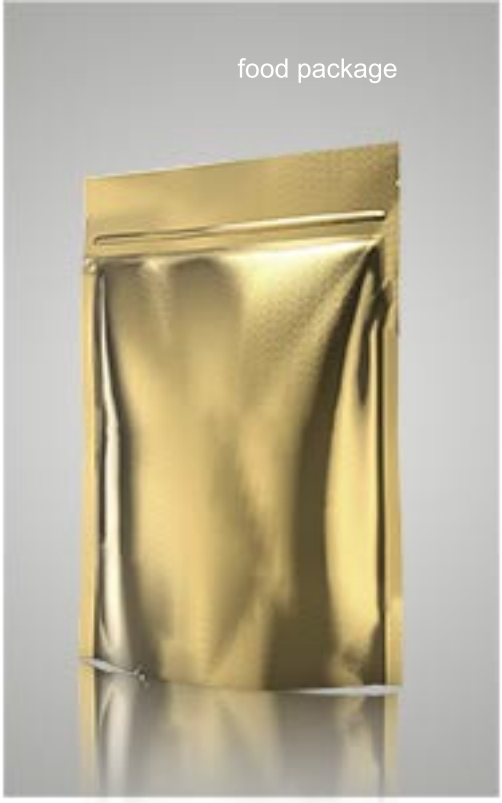
- The color shade is close to the most popular Bronze Powder in the market. Its reflective color shade can almost replace the Bronze Powder completely!
- The hiding power is twice that of a regular pearlescent pigment due to 3 major factors: (a) Pritty patented in-house technology. (b) narrower particle size distribution. (c) higher quality raw material (mica). Although the hiding power is not as high as Bronze Powder, it can fulfill the needs for most industries.
- The metallic effect is twice that of regular pearlescent pigments. As a mineral its metallic effect of course is less than Bronze Powder, but it is enough for most applications.



Applications

Printing Inks	Stationery	Plastics	Decorative Paints
Total Evaluation ★★★★★	Total Evaluation ★★★★★	Total Evaluation ★★★★★	Total Evaluation ★★★★★
Water-borne System ★★★★★	Heavy Metal Concentration ★★★★★	Heavy Metal Concentration ★★★★★	Water-borne System ★★★★★
Hiding Power ★★★★★	Hiding Power ★★★★★	Metallic Effect ★★★★★	Slower Sedimentation ★★★★★
Metallic Effect ★★★★★	Metallic Effect ★★★★★		Heat Resistance ★★★★★
Heavy Metal Concentration ★★★★★			

One star=saticfactory, five stars=outstanding; according to industry standards.

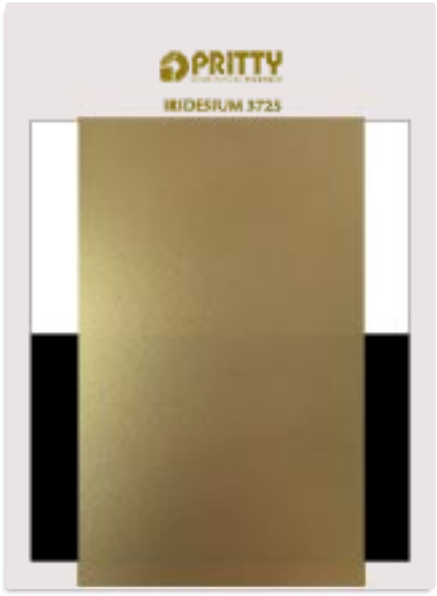


Target Applications

1. Industries relative to children and sensitive to heavy metal concentration, such as children stationery and toys.
2. Industries relative to food and cosmetic that are sensitive to heavy metal concentration, such as printing ink for cigarette package, wine label, food and cosmetic package; and plastic for food/ cosmetic package.
3. Water-borne paint and ink that have color changing issue with Bronze Powder.
4. Applications require temperature resistance of 200-300℃, such as plastics require a higher melting temperature, ceramics, and tiles.
5. Cosmetics, especially products in contact with eyes and lips.

Common Marketing Mistakes

1. Promote this product as a very close replacement, or a direct drop in for Bronze Powder.
2. Promote this product to customers who have no technical issues with Bronze Powder.
3. Distribute samples to all customers, without understanding their needs first.
4. Does not understand the product' s essential strength. Instead of providing solutions, push clients for quicker order.



crayon