

APPLICATIONS, CHARACTERISTICS AND INFORMATION OF PEARL PIGMENTS



Review - Pearl Pigments

Pearl Pigments are very fine particle pigments in metallic, interference, pearlescent, halo and hi-lite colors. It can be added to any art medium or used dry and over glazed making them a very useful basic color range for your tool kit. A single jar of gold pigment can be used with white glue, acrylic mediums and gels, fabric paints, clear stamp ink, watercolor and plain acrylic paints and varnishes, even wax, enamel paints and nail varnish or dusted on tacky hot melt glue to make all kinds of finishing materials for indoor and outdoor applications on anything from plastic and metal to polymer clay or paper.

Pearl Pigments are very fine powdered mica pigments that are non-toxic, inert, and can be mixed into virtually any viscous, transparent medium and applied to any surface, Since they are not metals, they will never rust or tarnish. The variety of finishes Pearl can produce is nearly endless—from metallic sheens to pearlescent shimmers to all manner of faux finishes.

Since Pearl effect pigments are semitransparent; the use of different colored primers makes it possible to achieve individual colors. The appearance depends on the viewing angle, resulting in a continually changing impression.

Applications



Very fine pigment can be applied in thin layers to create smooth metallic coatings on almost any surface. The pigments can be mixed with colored paints to deepen or contrast the pigment color. Pigments can be used for many types of applications allowing the matching of color in fabrics, miniature building surfaces, wood, plastic or metal surfaces. The pigments are dry, so they last for years and only small amounts are needed for most projects. These pigments allow you to combine a metallic sheen with almost any color of craft, acrylic or watercolor paint

APPLICATION IN PAINTS

Pearl fine pigments possess physical stability and can be used in water-based, solvent-based paints and powder coatings. Pearlescent paints can be prepared by incorporating the proportioned amount of pearl pigments into a clear lacquer or clear powder coating, this is the same for an enamel. Pearl luster pigments are supplied in various grades and each leads to a particular effect. A suitable grade should be selected according to the application. Pearl luster pigments are suitable for electrostatic coating. In addition they have good acid and alkali resistance. Normal Concentration

The normal concentration of Pearl Pigments for paints depends on the types and shapes to be painted and the painting or coating process. The following are normal concentrations used in various paints:

Paints	Concentration (%)
Automobiles	5-10
Construction Materials	5-10
Powder Coatings	2-7
Plastics	5-10

Remarks : Pre-mixture of Pearl Luster Pigments with a small amount of binder of binder paint or wetting agent leads to good dispersibility.

APPLICATION IN PRINTING INKS

Pearl pigments are available for printing inks as conventional pigments. There are various to choose from according to particle size range and should be selected according to the individual printing process. Pearl inks can be easily prepared, by the incorporation of pearl fine pigments into the ink medium. Normal Concentration

The concentration of pearl pigments in the ink medium depends on the printing process and article to be printed.

Printing Ink	Concentration (%)
Screen ink	5-20
Gravure ink	10-20
Off-set ink	30

Remarks: Pre-mixture of pearl fine pigments with a small amount of binder of ink medium leads to better dispersibility and printability

Application in paper

Pearl fine pigments are suitable to be used in many kind of coated and specialty paper, such as advertisement-used paper, name card paper, calendar paper, wall paper, and many kind of pearl luster packing paper. Pearl luster effects with colors of silver white, golden, lustre effects are available.

Application in leather

Pearl fine pigments applied to leathers and PU/PVC synthetic leathers can be directly blend into inks to use for printing on surface, also it can be added directly to transparent plastic resins to use for rolling and scraping production.

The most important characteristics of effect pigments

- ▶ For the finishing of all types of printing products and plastics
- ▶ In combination with printing inks and coatings
- ▶ In preprints and proof runs
- ▶ Very good properties for packaging printing as they do not singe or migrate
- ▶ They contain only trace elements of heavy metals
- ▶ They are environmentally friendly and thus pose no problem with regard to waste incineration.

- ▶ They are neutral in behavior in landfills because mineral pigments are insoluble in water and in solvents, and do not decompose
- ▶ They are chemically neutral
- ▶ They are odorless and tasteless
- ▶ They are stable up to temperatures of 450°C to 800°C
- ▶ They are physiologically harmless; since they do not trigger toxic reactions, they are completely safe for use in food packaging
- ▶ They meet European REACH Standard
- ▶ They contain no metal: the metal oxide used to coat the substrate has already been oxidized so there is no risk of a reaction with oxygen. The pigments are therefore eminently suitable in cases where electrical conductivity during use is not desirable or where metal may not be used for legislative reasons

GENERAL PROPERTIES	
Chemical Resistance	Resistant to water, diluted acids and alkalis, Organic solvents
Temperature resistant	Stable up to 800°C, not self-igniting
Electrical Characteristics	Non-conductive
Magnetic Characteristics	Non-Magnetic
Light resistance	Very good
Toxicology	Proved to be innocuous by government authorized institutes
Oil absorption	90±20g/100g

GENERAL SPECIFICATION

Type	Colour	Particle Size	Tio2,%	Special Properties
CR 5100	Silver Pearl	10-60µm	29	Bright pearl luster, widely used
CR 5300	Gold Pearl	10-60µm	38	Metallic gold appearance, bright highlights luster
CR 5500	Copper Pearl	10-60µm	38	Bright Metal luster, intense copper effect
CR 5504	Bronze Pearl	10-60µm	46	Bright Metal luster, intense wine red effect

Packing Size – 25kgs Drum

For your Pearl pigment requirements or if you need additional information on our products, please contact us on the given below numbers.