



Dry Metal Flake Glitter Technical Data Sheet



Flake King™ Polyester Flake was specifically designed to meet the requirements of manufacturers of decorated fabrics, adhesives, vinyl, sheeting, plastic molding, inks, paints, in industries such as automotive, leisure, commercial properties, theme parks, marine and many more, all of which require metal flake glitter with outstanding physical and chemical properties.

The following is a list of some of the varied and extensive testing Flake King™ flake has been exposed to:

Lightfastness: Tests were conducted in Miami, Florida in which samples of Flake King™ flake were exposed to the sun and elements. No barriers such as glass or plastic films, which would have had the effect of shielding the samples from ultra-violet rays, were used. Under these conditions of maximum exposure to semi-tropical sunlight, there was no discernible change in colour, nor was there any reduction in brilliance after 18 continuous months, at which time the tests were discontinued.

Chemical Resistance: Flake King™ flake has proved highly resistant to most commonly used commercial solvents, such as water, MEK, MIBK, alcohol, and high flash naphtha. Because of this excellent solvent resistance, this glitter/flake can be used in most solvent, acrylic, vinyl, and aqueous systems.

Temperature Resistance: Although Flake King™ flake has endured exposure to 350°F with no apparent loss of colour or reflective quality, the actual limit of resistance is dependent upon dwell time, mixing abrasion, and ambient process temperature.

Suspension Properties: Because Flake King™ flake has a significantly lower specific gravity than most liquid or gel mediums where it is incorporated, it will remain in suspension more uniformly during process application.

Colour adherence: The coatings used to produce Flake King™ flake are formulated, applied and thermoset to create a coating with superb strength and with excellent adhesion to film. Standard tests applied to the coated foil are: Cellophane tape strip test, 180 fold and crease test, and wrinkle test. Under all of these examinations, no separations occurred between the coating and the foil. In addition to excellent adherence of the coating to the foil, it is equally important that the colours are resistant to migration or bleeding into surrounding medium. Because the finest available transparent pigments are used, the colours are highly resistant to migration.

Colours: A beautiful spectrum of brilliant vibrant colours are available and our colour brochure is available for purchase through our exclusive network of distributors and dealers. We are also prepared to produce personalised versions for commercial partners available on request.

Toxicity: Flake King™ flake is a coated aluminum metallized Polyethylene Terephthalate, and is formulated to be Non-Toxic.

Quality: Flake King™ flake undergoes thorough quality control in all stages of production. The vacuum metallized polyester film, and coating are checked for gauge, brightness, colour match, solvent resistance and coating adherence. The glitter is then precision cut on specially developed high-speed machines with extreme accuracy. Size and shape of the glitter is checked at frequent intervals. After cutting, the glitter is carefully sifted through screens, two or more times dependent upon the size to remove any oversized or unseparated pieces.

LIMITATIONS:

- (1). Each chip of glitter flake has a minute edge of exposed aluminum created when the particle is cut from the sheet. Therefore, caustics and all chemicals normally affecting pure aluminum could react with this exposed edge. This does not preclude use of this glitter with these chemicals, however, since the short duration of most industrial processes may not afford enough time to cause significant damage to the finished product. It is advised that contact be checked carefully.
- (2). Concentrated sulfuric acid will cause separation of the coating from the foil.
- (3). Flake King™ flakes should be experience tested prior to application.

The above information is given for guidance only. While it is based on scientific evaluation, and is believed to be reliable, Flake King™ makes no warranties, whether expressed or implied, including warranties of merchantability and of fitness for a particular purpose for these products, since among other reasons the conditions of storage and use are beyond our control. No statements or recommendations contained herein are to be construed as inducements to infringe any patent.