

Pigments > Conventional Zinc Sulfide Based Pigments

The classic "glow in the dark" or phosphorescent pigments consist of very fine crystals of zinc sulfide. Copper is added to the zinc sulfide as an activator. This allows the crystals to absorb light and slowly emit it over time. The slow emission is called phosphorescence.

Products:

UMC Phosphorescent pigments, in addition to the natural colors, are available in a range of daylight fluorescent colors. All of UMC's phosphorescent materials are non-toxic and non-radioactive. Our product range is as follows:

6SSU is the basic phosphorescent pigment. This material has a light yellow (natural) body color and a yellowish green afterglow. 6SSU is designed to give the brightest and longest afterglow. Six colored phosphorescent pigments (the GSS Series) are also available. These are manufactured using a proprietary process which combines 6SSU with daylight fluorescent pigments. This result is a pigment with a distinct daylight body color and a variety of bright emission colors.

GSR is a recently introduced yellow emitting (glowing) pigment also consisting of very fine crystals of zinc sulfide. GSR is activated with small quantities of copper and manganese bound to the molecule, causing the "glow in the dark color" to shift to yellow. The major application of GSR is as a base pigment to effectively improve the "glow in the dark" emitting colors of yellow and orange daylight colored phosphorescent pigments. For example, GSR 115/2 Orange which has a bright orange afterglow has been specially developed for Halloween. GSR 115/2 Orange is shaded with a heat resistant fluorescent pigment so it can be used for plastics as well as general ink or coating applications.

Daylight Body Color	Product Code
Natural (Green emitting)	6SSU
Yellow	GSS 205/1
Orange-Yellow	GSS 207/1
Orange	GSS 305/1
Rose	GSS 507/1
Green	GSS 905/1
Blue	GSS 8B/1
Natural (Yellow emitting)	GSR
Orange (Orange emitting)	GSR 115/2