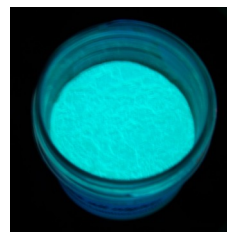


Luminescent Glow-In-The-Dark Powder



Our standard glow powder is great for many glow in the dark projects. It can be used anywhere long lasting, bright output, glow in the dark luminescence is needed such as clock or watch hands, electronic instrument panels, emergency signage and much more. It can be used in writing and printing inks (gravure, flexo, and litho), paints and coatings (including oil based systems), and textile printing. You are only limited by your own mind! Our product is a full one ounce of glow powder, not including the container so you get all product for what you pay. Our powder is yellow-white in light and glows blue when charged and put in darkness. Will reach full charge in fifteen *minutes* of sunlight or strong florescent light such as kitchen light for 15 to 20 minutes. Glow will diminish over time but still be glowing at 5 a.m. the next morning.

Quick Look

- 1 ounce blue glow in the dark powder
- Afterglow ten times Zinc based powders
- Can be used in oil based paints and coatings and polyester or epoxy resins
- Will glow all night when fully charged
- Phosphorescent pigment
- Based on Strontium Oxide Aluminate chemistry
- Excellent weather and light fastness
- Free of hazardous and radioactive substances
- Not suitable to be mixed with acids

Brightness, Afterglow and Emission Color

The most effective energy saturation can be obtained when the pigment is exposed under direct ultra violet rays (UV) from the sun, black lamps, halogen lamps, discharge lamps, and other light sources which are rich in UV light (this can be seen also from the Excitation Emission curves). Tungsten lamps are not very effective exciters as their light output is weak in UV. With fluorescent lamps, which are rich in UV, faster excitation is possible when the pigment is placed near them. Afterglow brightness is also proportional to the intensity of UV energy contained in the excitation light.

Luminescent Products
5589 46th Ave N
Kenneth City, FL 33709
sales@Luminescentproducts.com

Paints & Coatings:

- Use a transparent solvent vehicle with neutral or alkaline pH.
- Do not grind the pigment, just stir. If possible use light colored ceramic or glass lined vessels.
- Plan on using about 10 parts to 6 parts of binder (by weight).
- Shelf life depends on the moisture content of the vehicle, if moisture is present, shelf life is diminished. Although solvent based paints do not contain moisture, some of them might absorb ambient moisture. Therefore take precautions to minimize this from happening.
- To minimize settling, use a viscous vehicle and/or antissettling agents. Stir well prior to application.
- Apply a white base coat under the phosphorescent layer to improve afterglow.
- Apply a clear overcoat to protect the pigment from humidity and to improve gloss.
- All additives should be free of heavy metal compounds.

•

Inks: Silk Screen & UV Cured:

- Viscosity of inks should be about 3,000-5,000 poise. During printing, viscosity should be adjusted by using a diluting agent based on printing speed.
- Apply a white base coat under the phosphorescent layer to improve afterglow.
- Minimum film thickness of the layer should be 100 um. In order to achieve maximum afterglow (over 8 hours), a film thickness of 130-150 um is required. For achieving this thickness two passes may be necessary.
- Ideal screen size would be 80 - 100 mesh. Larger screen openings would give better results. Preferably, use screens manufactured from synthetic resins.
- To minimize settling, use a viscous vehicle and/or antissettling agents. Also stir well prior to printing.
- It is very important to keep the entire system dry! A yellowing of the resin may indicate the pigment reacting with moisture.

Plastics- General:

- Our powder is compatible with Acrylic, Polyester, PUR, Epoxy, PVC, Polycarbonate, Polypropylene and Polyethylene (HDPE, LDPE, etc.) polymers.
- Material can be cast, dipped, coated, extruded or molded.

General Precautions

- Do not grind or mill the pigment. Breaking down the crystals will destroy the afterglow.
- Avoid exposing the pigment to strong acids or heavy metal compounds. They will react and destroy the glow.
- Also keep away from moisture.
- The powder is a hard material and this might cause abrasion of extruder internal metal surfaces. In order to avoid this problem either use specially surface hardened barrels and screws, or a wax to wet the powder prior to extruding, or use a machine with two entry ports.
- Avoid moisture and aqueous systems. Once the pigment is incorporated into the solvent based resin system or plastic resin, it is not affected by moisture.
- Afterglowing properties depend on the pigment quantity used and the manufacturing process in which the pigments are applied. The efficiency of phosphorescent pigment containing articles can only be observed when installed properly and excited under correct lighting conditions.