

Technical Data Sheet

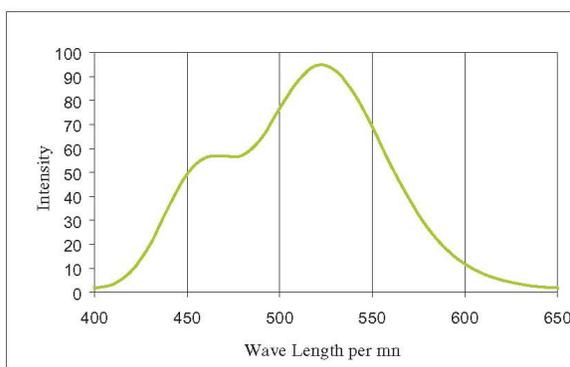
NightGlo NG-200 Phosphorescent Pigment

General Description

NG-200 is a Zinc Sulfide compound that responds quickly to excitation by daylight, incandescent, fluorescent or ultraviolet lights. This pigment emits a bright Green phosphorescence shade. It exhibits high initial brightness and afterglow. The afterglow effect is dependent on pigment concentration, surface area and amount of radiant energy absorbed.

Physical properties	
Emission Color	Green
Afterglow Color	Green
Daylight Body Color	Slightly Yellow
Specific Gravity	4.1
Particle Size (D50)	18-25 Microns
Melting Point	1830 degrees C
Mohs Hardness	3.0

Emission Spectrum



Application

NightGlo NG-200 exhibits excellent heat stability.

It is recommended that it be used in plastic resins such as acrylics, nylons, polystyrene, polyolefins and vinyl. Recommended concentration is approximately 10% by weight.

NightGlo NG-200 can be mixed with certain transparent pigments or colorants such as DayGlo fluorescent dyes and pigments. This combination will achieve some very attractive special effects. Recommended loading is a 1 to 10 ratio of fluorescent to phosphorescent pigment.

Precautions

When handling phosphorescent pigment, some precautions should be taken when:

- Working with strong acids since this can cause dissolution of phosphorescent pigments. In the presence of high relative humidity and sunlight, phosphorescent pigments can exhibit darkening.
- It is not recommended to mill this product since this will degrade the phosphorescence due to breakdown of the crystal structure of the phosphorescent pigment. Mild stirring should be used to incorporate NG-200 into a vehicle.

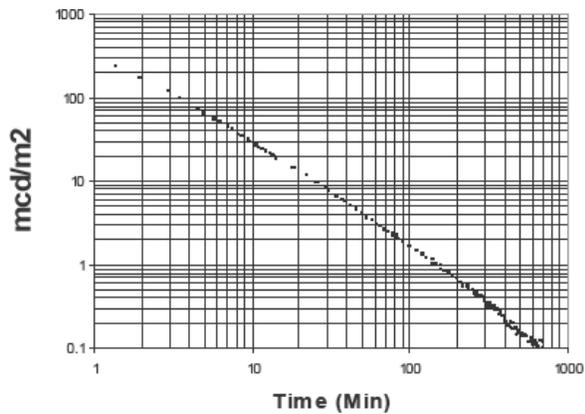
The addition of colorless extenders or colored pigments will reduce the intensity of the phosphorescence.

Testing is recommended in the intended application to determine suitability.

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Persistence Curve

DIN67510, Part 1 (Xenon Excitation – 5 min. @ 1,000 Lux, 22°C ± 3°C)



10 min. (mcd/m ²)	60 min. (mcd/m ²)	Time to reach 0.32 mcd/m ²
≥26	≥2.5	≥280 min.