Glow Pigment

Introduction of Glow pigments

Photoluminescent pigment is also known as a long-lasting photoluminescent pigment, luminous pigment, luminescent pigment, phosphorescent pigment, glow pigment, glow in the dark pigment.



Glow pigment in the daytime



Glow pigment in dark

Types of glow pigments

There are 2 types of glow pigment: one is an alkaline earth aluminate-based long afterglow photoluminescent material activated by rare earth elements, and the other is traditional sulfidebased photoluminescent material, Particularly, the alkaline earth aluminate photoluminescent material can absorb various visible light which wavelength less than 450nm for 10-20 minutes and then emit light continuously for over 12 hours in the dark. The luminosity and its glow time are 30 times more than traditional luminous materials represented by ZnS:Cu; and its light absorption, storage, and emission capabilities can be recycled.



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Email:info@additivesforpolymer.com Web:www.additivesforpolymer.com 8th Chenwu East Road, Houjie Town, Dongguan City, Guangdong Province, China photoluminescent pigment in daytime



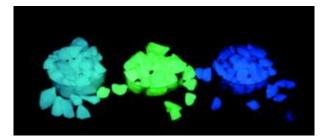
photoluminescent pigment in dark

Features of baoxu photoluminescent pigments

- 1. Continuous light, reliable.
- 2. Non-toxic, non-harmful, non-radioactive
- 3. Recycle absorption and emission of light.
- 4. High luminance, long afterglow time.

Baoxu photoluminescent pigments

Composition: Alkaline earth aluminate or silicate with rare earth elements. Features: High luminosity, long afterglow time Appearance color: Light yellow, grayish white, and light gray Glow Color: Yellow-green, blue-green, sky-blue, and purple Application: coating, ink, paint, plastic, printing paste, fibers and others.



Glow in dark pigment in resin



Industries: Fire safety signage, fishing equipment, toys, gifts, and others.

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glow pigment in safety signage application

Baoxu photoluminescent pigment series

Baoxu PLP L

PLP L series photoluminescent pigment is alkaline earth aluminate luminous material. These products can glow for more than 12 hours after absorbing various visible light or ultraviolet radiation. The luminance is 350-700mcd/m2 and afterglow is more than 12 hours. The physical properties are as tabled below:

| PRODUCTS | PLP LY | PLP LG | PLP LGR | |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|--|
| Body Color | light yellow | light green | light gray | |
| Emitting color | yellow green | blue green | blue purple | |
| Composition | MeO·xAl2O3:Eu (Me=Ca、Mg、Sr; x=0.5-2.0) | | | |
| Excitation wavelength (nm) | 200-450 | 250-450 | 250-400 | |
| Emission wavelength peak(nm) | 520 | 490 | 440 | |
| Medium Particle size(µm) | 1-100 | 1-100 | 20-40 | |
| Afterglow brightness (mcd/m2) | 100-600 | 100-500 | 10-20 | |
| Afterglow time | ≥12 h | ≥12 h | ≥6 h | |
| Light resistance | ≥1000 h | ≥1000 h | ≥1000 h | |
| Chemical stability | Excellent, small decomposed in water. | | | |
| Temperature resistance | Luminescent brightness is weakened along with the elevated temperature and extended time during 250-600 $^\circ\!\mathrm{C}$ | | | |
| Allowable temperature | ≦250°C | | | |
| Density (g/cm3) | 3.6 | | | |

Baoxu PLP S

PLP S series photoluminescent pigment is alkaline earth silico-aluminate photoluminescent material, which combines the character of high afterglow luminance for alkaline earth aluminate photoluminescent material and rich in color for alkaline earth silicate photoluminescent material. These products can glow for more than 12 hours after absorbing various visible light or ultraviolet radiation. The luminous pigment has excellent stability and weatherability. The features of PLP S series glow pigment are 220-550mcd/m2 in luminance and more than 12 hours long afterglow time and rich in color, the physical properties are as tabled below:

| PRODUCTS | BX PLP S series | | |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------|--|--|
| Body Color | light green to yellow-green | | |
| Emitting color | yellow green | | |
| Composition | MeO·xAl2O3·ySiO2∶Eu (Me=Ca、Mg、Sr、Ba; x=0.5- 2.0; y=0.01-0.5) | | |
| Excitation wavelength (nm) | 200-450 | | |
| Emission wavelength peak (nm) | 520 | | |
| Medium Particle size (µm) | 1-100 | | |
| Afterglow brightness (mcd/m2) | 40-400 | | |
| Afterglow time | ≥10h | | |
| Light resistance | ≥1000h | | |
| Chemical stability | Excellent, small decomposed in water | | |
| Temperature tolerance | Luminescent brightness is weakened along with the elevated temperature and extended time during 250- 600° C | | |
| Allowable temperature | ≦250 ℃ | | |
| Density (g/cm3) | 3.6 | | |

Remark

(1)The unit of particle size is μ m. The particle size is expressed by Medium Particle size (D50). (2)The unit of afterglow brightness is mcd/m2. All the tests are executed according to the standard of DIN67510, which is to detect the afterglow brightness of the sample for 10 min excited by D65 standard light source illumination of 1000LX for 5 min.

Sample and Inquiry

Please contact our online sales or mail at info@additivesforpolymer.com for a sample and general inquiries.