# Phosphorescent Pigments

## Phosphorescent Pigments · · ·

Phosphorescent pigments store sunlight and light from lighting, and gradually release light energy (luminescence) even when there is no light.

The main components of phosphorescent pigments are zinc sulfide, which has been used for a long time, and strontium aluminate, which has been used recently. Although zinc sulfide pigments have a short afterglow time and low brightness, they are still used in toys because they are inexpensive.

Our phosphorescent pigments are produced using a unique manufacturing method.



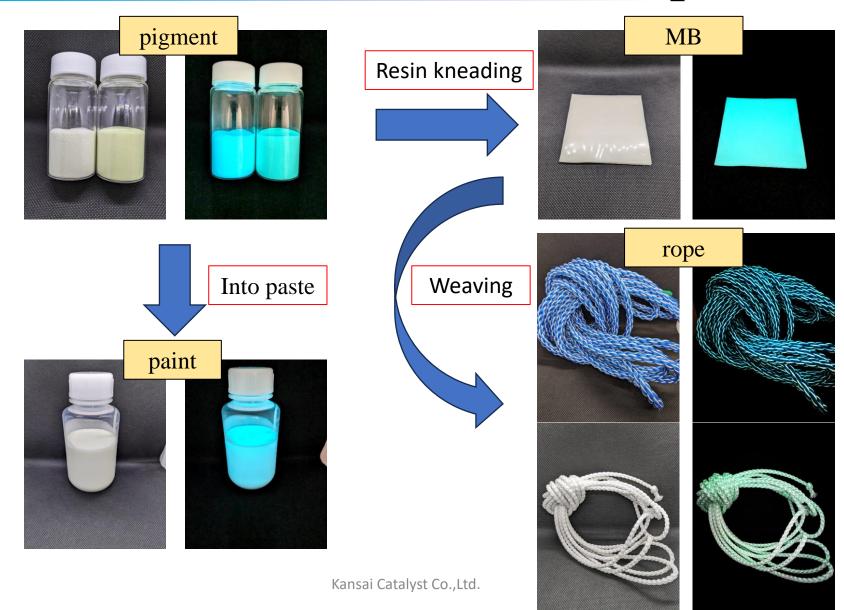
in bright place



in dark place

Kansai Catalyst Co.,Ltd.

### Sales Product (under development)



#### Phosphorescent Pigments



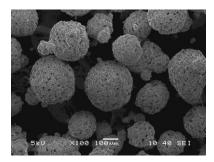


#### characteristics

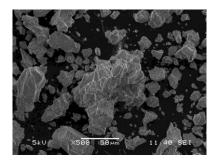
- spherical particles particle size 150 μm
- easy to crush after crushed particle size  $10\sim20\mu m$
- · high brightness

in bright place

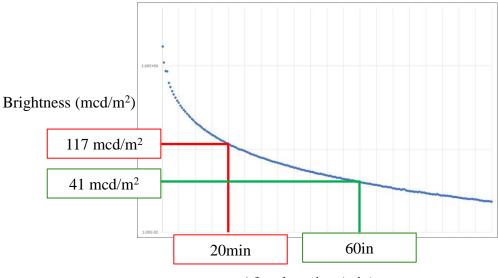
in dark place (left: BG, right: YG) (left: BG, right: YG)



Before crushing SEM



After crushing SEM



Afterglow time(min)

### Phosphorescent paint





#### Phosphorescent coating material

Can be painted on resin products, ceramics, film, etc. Select the paint according to the purpose.

- ☆Types of phosphorescent paint
  - \* organic solvent paint
  - \* water based paint
  - \* traffic paint



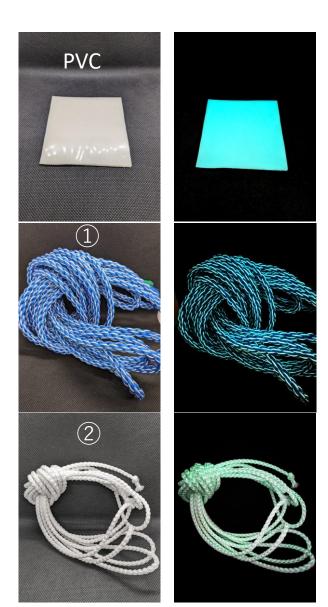


Example of construction

Red marks area are painted with phosphorescent. (Blue marks area are only white line.)

White line isn't visible at night, but phosphorescent line can be clearly seen.

### Resin product



#### Resin kneading

It can be kneaded into resin and made into a masterbatch. The higher the pigment concentration, the higher the brightness.

- ☆Achievement;
  - \* polypropylene;PP
  - \* polyethylene;PE
  - \* polyvinylchloride;PVC

#### Rope

It is made into rope by weaving filose resin.

The price is kept down by combining it with regular strings.

Rope of material: PP

- ① (Blue strings + Phosphorescent strings)
- ② (White strings + Phosphorescent strings )