

## Photochromic Pigment

### Other names:

Light sensitive pigment; photosensitive color material; light powder  
Photosensitive discoloration material; sunlight coloring pigment.

### Description

iSuoChem™ Photochromic pigment is a new product developed by micro-encapsulation technology. It adopts UV-sensitive microcapsules to encapsulate pigment and enable color change under UV light. Through shrinking and expanding, the pigment or its downstream products will show color under sunlight or UV light and hide the color after leaving sunlight or UV light. It can be used repeatedly. It can change color quickly and no residual color after changing.

**Basic color:** Red, yellow, blue, purple.

**Other color:** Purple, sky blue, green, grey, orange, rose red etc. We can also customize color as your request.



### Characteristic

Average particle size: 3 -10 microns; 3% moisture content; heat resistance: 225°C;  
Good dispersion; good weather fastness.

### Remark

Prolonged exposure to strong ultraviolet light can lead to damage to microcapsules, and influence the effect of color change.

### Suggested usage amount

| Water-based ink/paint | Oil-based ink/ paint | Plastic injection/ extrusion |
|-----------------------|----------------------|------------------------------|
| 3%~30% W/W            | 3%~30% W/W           | 0.2%~5% W/W                  |

### Application

It can be used for textiles, clothing printing, shoe materials, handicrafts, toys, glass, ceramic, metal, paper, plastic, etc.



### Tips

1. Substrate selection: PH value of 7 ~ 9 is the most suitable range.
2. Excessive exposure to UV light, acid, free radicals or over humidity could lead to light fatigue. It is generally recommended to add UV absorbers and antioxidants to improve light fatigue resistance.
3. Additives like HALS, antioxidants, heat stabilizers, UV absorbers and inhibitors can improve light fatigue resistance, but a wrong formulation or unsuitable selection of additives could also accelerate light fatigue.
4. If condensation happens in the water emulsion with photochromic pigment, it is recommended to heat and stir, then reuse after dispersing.
5. Photochromic pigment does not contain harmful substances to humans. It conforms to the safety regulation of toys and food packaging.