



Irreversible UV Photochromic colorant **Photolock MS Powder**

Product Outline

Photolock MS Powder is powder form of the micro-encapsulated irreversible photochromic colorant behaving from colorless to blue-color changing gradually according to the amount/degree of UV light.

Compounding it into solvent-based medium and printing, the print with the irreversible photochromic effect can be achieved.

Also, it can be compounded into molding resin for injection and extrusion molding.

Photolock color is irreversible and shows its blue color according to the accumulated amount of UV light.

It is ideal to use Photolock for a simple Light-Meter, Sun-burn indicator, UV-light historic indicator.

Property

	Photolock MS Powder
Appearance	Pale Blue Powder
Component	Micro-encapsulated irreversible Photochromic colorant
Density (g/cm ³)	1.05±0.05
Bulk density (g/cm ³)	0.30±0.05

Color / Temp. Types

Available Color

Blue

Temperature Types

Type #3

Changes its color by minutes

Type #4

Changes its color by hours

Considerations

- Keep always sealed and store in cool and dark place. Shelf Life ; 6 months under 30°C
- Avoid exposing to moisture. The powder absorbed moisture has poor dispersibility. It is advisable to have pre-dry at 80°C x 3 hours before using.
- Solvent having high polarity, such as Methanol, Acetone, DMF, and also the mixture of water and organic-solvent should not be used as it shortens the pot-life of the solution.
- Only compounding by a mixer can not well loosen its primary particles, which may causes erratic color hues. Please, use roller mill 2-3 times to disperse the powder well.
- Photolock has weak coloring power, so its dosage needs to be adjusted relatively high.
- Even after the desired Photolock color is achieve, the color may get further darker or may get faded by UV light. This is the nature of Photolock. Please, design the final product considering this symptom.

- Photolock color may get faded by retort process.
- The product contains 'formaldehyde. Carefully refer the SDS before use.
- Photolock color strength may vary +/- 10% by lot to lot.

*Carefully test to see the applicability before bulk use.



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