



Reversible thermochromic colorant

## CHROMICOLOR MS Powder LF Grade

### Product Outline

CHROMICOLOR is a reversible thermochromic colorants. According to the purposes, CHROMICOLOR MS Powder LF Grade can be applied to solvent-based screen printing inks and gravure printing inks. Also, it can be used as a dry color to be mixed into molding resin for masterbatches.

### Property

|                                   | CHROMICOLOR MS Powder LF Grade                    |
|-----------------------------------|---------------------------------------------------|
| Appearance                        | Various Color Powder                              |
| Component                         | Microcapsulized Thermochromic colorant            |
| Ave. Particle Size                | 2.0 ~ 4.0 $\mu$ m (FAST YELLOW = 3.0-5.0 $\mu$ m) |
| Density (g/cm <sup>3</sup> )      | 1.05 $\pm$ 0.05                                   |
| Bulk density (g/cm <sup>3</sup> ) | 0.3 $\pm$ 0.05                                    |

### Color / Temp. Types

Available Colors; 11 colors

|                                                                                                 |                                                                                                     |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|  Fast Yellow |  Fast Blue       |
|  Gold Orange |  Turquoise Blue  |
|  Vermilion   |  Brilliant Green |
|  Pink 2      |  Green 2         |
|  Magenta     |  Fast Black      |
|                                                                                                 |  Brown         |

### Temperature Types

|          |          |
|----------|----------|
| Type #5  | Type #20 |
| Type #10 | Type #25 |
| Type #15 | Type #27 |
| Type #17 | Type #35 |
|          | Type #37 |

### Considerations

- Keep sealed and store in dark place under 30°C.  
Shelf Life; 6 months.
- Avoid exposing to moisture. The powder absorbed moisture has poor dispersibility into oilbased inks.  
It is advisable to have pre-dry at 80°C x 3 hours before using.
- Solvents 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 potlife 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 to disperse the powder well.
- CHROMICOLOR MS Powder LF Grade has weak coloring power, so its dosage is higher than regular pigment colors.
- When it discolors at 5°C+ higher than the set Temp., it memorize the Temp. and does not well come back to its colored state. (ghosting symptom) In such case, arrange intentional cool-down 5°C+ lower than the set Temp. to reset the coloring behavior. This ghosting symptom is more likely to happen with CHROMICOLOR Fast Blue.

- CHROMICOLOR may lose its color by retort process; therefore, CHROMICOLOR is unsuitable to the packages and packing for retort.
- The product has weak light-fastness (not only Sunlight but any lights), so pre-test is a must to judge the suitability.
- The color strength may vary +/- 10% by lot to lot.
- The product contains 'formaldehyde' less than EU regulation level. This product is applicable to SNUR requirements. Please, carefully refer the SDS before use.

\*Carefully test to see the applicability before bulk use.



MATSUI SHIKISO CHEMICAL CO., LTD.

Head office : 64, Kamikazan Sakuradani, Yamashina-Ku,  
Kyoto 607-8466, Japan  
TEL.075-594-5612