



## BRILLIANT PHOSPHORESCENT MASTERBATCH BPM SERIES

Brilliant Phosphorescent Masterbatch Series delivers high-brightness photoluminescence in a convenient, ready-to-use form. Engineered for masterbatch producers and compounders, these materials eliminate the challenges typically associated with raw phosphorescent pigments, such as dispersion issues, abrasive wear, scrubbing of machine residue, etc.

Available in a range of carriers across multiple polymers, including PE, PP, EVA, ABS, PC, PMMA, TPU and PVC, the **BPM Series** offers consistent glow performance in applications like safety signage, emergency markings, consumer products, toys, and special effects plastics. Phosphorescent afterglow colors are available in yellow-green and more, in loadings of 35% or 50%, depending upon the carrier resin.

Designed for uniform pigment dispersion and optimized for extrusion and injection molding, **BPM Series** helps reduce hassle for masterbatch producers by protecting equipment, improving production efficiency, and delivering reliable glow performance.

**PRODUCT DESCRIPTION:** Photoluminescent Masterbatch, varying plastic bases

### CHEMICAL PROPERTIES:

|                   |  |
|-------------------|--|
| Formula:          | 35-50% Phosphorescent pigment/ 50-65% carrier resin<br>(LDPE/PP/EVA/ABS/PC/PMMA/TPU/PVC) |
| Appearance:       | Light yellow pellets   |
| Specific gravity: | 1.8-2.2g/cm <sup>3</sup>   |

## PRODUCT GUIDE

The **BPM Series** is available in numerous carrier resins. This allows for greater flexibility to fit customer needs and service product demands.

|                  |   |
|------------------|---|
| BPM-PE-YG35      | Yellow-Green, LDPE, 35% Loading                               |
| BPM-PE-YG50      | Yellow-Green, LDPE, 50% Loading                               |
| BPM-PE-YG50L     | Yellow-Green, LDPE, 50% Loading, Extra Long Glow              |
| BPM-PP-YG35      | Yellow-Green, Polypropylene, 35% Loading                      |
| BPM-EVA-YG50     | Yellow-Green, EVA, 50% Loading                                |
| BPM-ABS-YG35     | Yellow-Green, ABS, 35% Loading                                |
| BPM-PC-YG35      | Yellow-Green, PC 35% Loading                                  |
| BPM-TPU-YG50     | Yellow-Green, TPU, 50% Loading                                |
| BPM-PVC-65-YG50  | Yellow-Green, PVC (60-70 Hardness), 50% Loading               |
| BPM-PVC-95-YG50L | Yellow-Green, PVC (95 Hardness), 50% Loading, Extra Long Glow |

## TYPICAL LIGHT SOURCE:

|                         |                       |
|-------------------------|-----------------------|
| Excitation illuminance: | 1000 lx, D65 standard |
| Excitation time:        | 10 minutes            |
| Temperature:            | 23 degrees C          |

## AFTERGLOW INTENSITY (mcd/m<sup>2</sup>)

|            | Yellow-Green | Yellow-Green Extra Long Glow |
|------------|--------------|------------------------------|
| 10 minutes | 250          | 320                          |
| 60 minutes | 32           | 42                           |

## APPLICATIONS

Photoluminescent plastic masterbatch is a type of plastic pellet with self-glowing properties. It is made from high-tech luminescent materials—specifically, photoluminescent pigment—through advanced processing. This masterbatch offers high brightness, pure color, and more than 12 hours of afterglow. It can be directly injected or blended with other similar plastics in a specific ratio, depending on the desired level of luminosity, to create a variety of photoluminescent plastic products.

## NOTES ON USE

Typically, when photoluminescent pigment is directly mixed with plastic material for injection molding, the resulting products may suffer from blackening, dimming, and uneven glowing. By using photoluminescent masterbatch, the final products achieve a more even glow and pure color.



## **HEALTH AND SAFETY**

Brilliant BPM Series is not radioactive and is generally considered to be of low toxicity if used and stored as recommended. If stored in sealed containers, the shelf life is indefinite. Please refer to the separate SDS for specific information.

## **IMPORTANT: DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY**

### **Technical Information**

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