



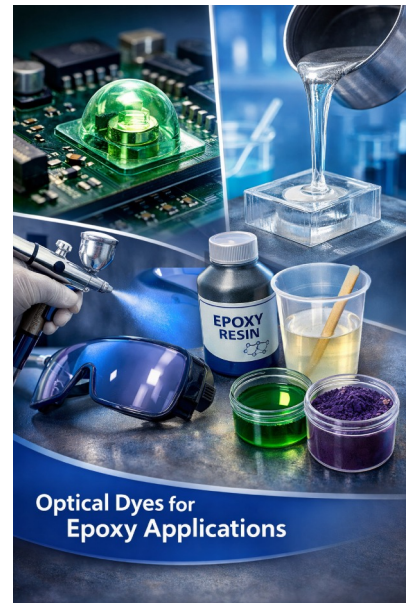
Optical Dyes for Epoxy Applications

Epolin develops specialty absorbing dyes designed to precisely control how epoxy systems interact with light across the ultraviolet (UV), visible, and near-infrared (NIR) spectrum. Epoxies are widely used in coatings, adhesives, encapsulants, and optical components, making them an ideal platform for integrating advanced light-management functionality.

Epolin dyes can be incorporated into epoxy formulations to selectively absorb, transmit, or attenuate specific wavelengths while maintaining the mechanical, thermal, and processing properties required for demanding applications.

Key Use Cases for Dye Loaded Epoxy

- Optical Encapsulation & Potting Compounds to manage LED lighting
- Coatings & Functional Layers to control and manage light
- Adhesives with Optical Functionality for filtering or detection
- Electronics & Sensor Integration for filtering and light control
- Industrial & Protective Systems for laser protection and machine vision



Why Epolin Optical Absorbing dyes for Epoxy Applications?

- Spectral Precision – Targeted UV, visible, and NIR control
- Functional Integration – Optical performance built directly into epoxy systems
- Low Loadings – Effective performance at minimal dye concentrations
- Formulation Flexibility – Compatible with a range of epoxy chemistries
- Optical Consistency – Reliable batch-to-batch performance
- Technical Support – Guidance for formulation and optical design

Development & Integration Support

Epolin works with formulators, OEMs, and component manufacturers to support epoxy-based optical solutions by providing:

- Spectral absorption and transmission data
- Assistance with dye selection and loading levels
- Support for formulation development and scale up

From optical encapsulation and coatings to adhesives and sensor integration, Epolin dyes enable advanced light management in epoxy-based systems.

Contact us for additional information
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