

## + Plasticolors® UV Solutions®

### Pigment Dispersions for Exterior Performance

UV Solutions® technology employs a total system approach to deliver the best weathering performance in fiber reinforced plastics. Continuous research over 30 years allows Chromaflo to create the optimal combination of pigments and additives, resulting in the maximum UV protection tailored to each unique resin system and application.

#### ► Key Benefits

UV Solutions® pigment dispersions are uniquely balanced to meet the required UV design criteria and are available in a full palette of colors and pigment chemistries. Providing as much as 100 percent UV performance improvement over standard pigment dispersions, UV Solutions® products deliver superior lightfastness in each color space. Custom colors are designed to maximize UV durability based on the resin system, molding parameters, and color space.

#### ► Applications

Designed primarily for polyester applications, UV Solutions® pigment dispersions are developed to improve UV performance in exterior composites applications, including:

- Sheet Molding Compound (SMC)
- Bulk Molding Compound (BMC)
- Pultrusion

They can also be used in Thick Molding Compound (TMC), Cast Polymer, Panel, UPE Gel Coat and Aliphatic Polyurethanes.

#### ► Compatibility

All UV Solutions® pigment dispersions are compatible with unsaturated polyesters, vinyl esters and select polyurethane systems and can be tailored for different resin systems.

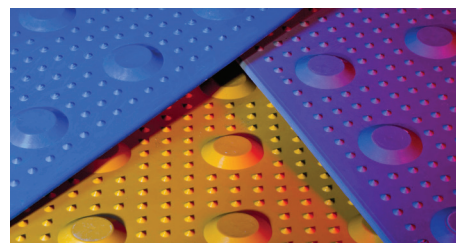
#### ► Properties

Most UV Solutions® products contain no solvents or reactive monomers, are heavy metal free\*, and produce high tint strength. Select products may contain solvents, reference individual product technical data sheet for information. In most cases, exterior grade pigments are selected to optimize UV performance and maximize hiding power. Our technology also produces the optimal particle size for color strength and pigment efficiency, ensuring high color strength and superior lightfastness.

#### ► Handling and Storage

Proper handling is essential to maintain good quality. Containers should be tightly sealed when not in use. This will prevent the absorption of atmospheric moisture and minimize the chance of airborne contamination. Containers should be stored in a manner as to protect them from temperature extremes (0-45°C, 32-120°F). It is recommended that the colorants be mixed prior to use if stored more than 30 days. Shelf life of most UV Solutions® products is 24 months from the date of manufacture in unopened containers, reference individual product technical data sheet for information. Reference the MSDS for more product care information.

\* Chromaflo Technologies does not intentionally add any heavy metals, reactive monomers or solvents to these dispersions. However, some raw materials may contain impurities in trace amounts.





► **UVSolutions® Pigment Dispersions for UV Stabilizing Fiber Reinforced Composites**

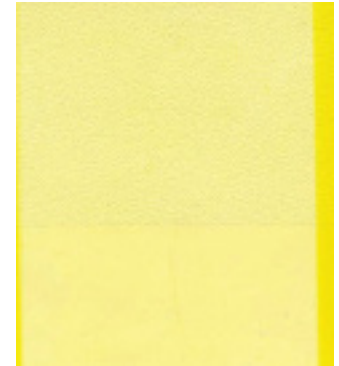
For over 30 years, Chromaflo has helped advise our customers on the best ways to develop their compound formulations to improve UV durability. Our formulators will work with you to design a product that meets your requirements with the optimal pigment and UV additive chemistries.

Key factors to consider include:

- Final Application
- Matrix Chemistries
- Color Space
- Accelerated and/or Actual Weathering Test Method(s)
- Criteria: ΔE, Gloss Retention and Duration
- Cost Restrictions

UVSolutions®

Standard System



2% UVSolutions® organic yellow colorant in optimized polyester molding system

2% polyester organic yellow colorant in standard polyester molding system



2% UVSolutions® organic red colorant in optimized polyester molding system

2% polyester organic red colorant in standard polyester molding system

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