

# Technical Data Sheet

## VCL Aqueous Colorants

### General description

DayGlo VCL pigments offer excellent dispersion, heat stability, and improved lightfastness in plastisol applications.

VCL is the standard bearer for the traffic cone industry. The pigments are non-formaldehyde, meet CONEG specifications and are also available in non-phthalate versions.

### Applications

- Rigid PVC
- Plastecized PVC

### Product features

- Do not cause buildup on calendaring or two mill roll equipment
- Low degree of plateout
- Typical use rate is 1 – 3% pigment by weight
- Designed for maximum transparency
- Excellent edge glow

### Available Colors

Product Code	Color
VCL2014	Fire Orange
VCL2018	Signal Green
VCL1700	Saturn Yellow

### Packaging:

5 Gallon Pails (weight varies by color)  
55 Gallon Drums (weight varies by color)

### Storage & shelf life:

12 months when kept in closed original packaging in a dry place at ambient temperature.

### Safety & regulatory:

Safety Data Sheet available on request.

### Physical properties

Delivery form	Aqueous dispersion
Average particle size	20-60 µm
Melting point	250°F-340°F (120°C-170°C)
Decomposition temp.	>300°C
Specific gravity	1.26 g/ml

## Processing

### Heat stability

395°F (200°C) VC-Pigments display no color change after a heat history of 20 minutes at 350°F (175°C) on a two roll mill. For injection molding, it is recommended that the pigment be converted into pellet form in order to minimize sifting, packing and potential burn-out

Dispersions are soluble and are easily mixed-in. Mix dispersions well before use for best results

(1)Test methods and Certificate of Analysis (COA) available on request.

## Stabilizer

VC-Pigments do not have any lead or cadmium containing stabilizer.

## Transparency

For opacity, TiO<sub>2</sub> can be added at a ratio of 3:1 - VC-Pigment:TiO<sub>2</sub>. Small amounts of TiO<sub>2</sub> may be necessary in transparent resins to increase the fluorescent effect.

## Lightfastness

The higher the pigment concentration, the better the lightfastness. The lightfastness can be influenced by plasticizers, stabilizers, and other additives. At a concentration of 3%, VC-Pigments exhibit better lightfastness than other organic fluorescent pigments tested in an Atlas Xenon Arc Weatherometer.

## Usage

Typical formulation of VC is 3% of vinyl colorant by total weight of vinyl compound or resin is recommended as a starting point.

Bleeding that occurs when using VC-pigments is greatly influenced by the amount of plasticizer used in the vinyl formulation. The tendency to bleed can be reduced by using lower amounts and/or higher molecular weight plasticizers.