

## + Chroma-Chem® 50-990

### Pigment Dispersions for Water-based Coatings

The 50-990 Series colorants have been formulated for use in most water-based coatings. The colorants are based on a stabilizing package that provides outstanding colorant performance in a variety in-plant coating systems.

#### ► Key Benefits

The 50-990 Series are very-low VOC pigment dispersions consisting of pigments milled in a blend of water and additives. This package produces colorants with compatibility in a wide range of water-based chemistries. To better meet current VOC regulations, these colorants do not contain any added VOC's and are glycol free.

Since the 50-990 Series colorants are not based on an alkali-soluble resin, they will be compatible with coatings systems having a wider pH range compared to many water-based colorants. While colorants based on alkali-soluble resin can only be used in systems with a pH around 8 to 10, these colorants will be compatible with coatings having slightly acidic or alkaline characteristics.

These colorants are formulated at maximum pigment loading to ensure minimal effects on the final coating properties. The formulation of each colorant within the series was developed to ensure the stability and handling properties were maintained.

#### ► Properties

These colorants offer the coatings formulator a product line with low VOC levels, excellent pigment development, and good rheological characteristics. Other benefits include high pigment loading for excellent color control and economy of use.

The tint strength of these colorants is controlled by weight to +/- 3% to ensure optimal in-plant tinting performance. Color difference is also controlled to ensure lot-to-lot consistency.

#### ► Applications

The colorants in this series are formulated for use in water-based industrial coatings including, but not limited to, automotive interior OEM, industrial maintenance, marine, wood, coil, general OEM, leather finishes, and other protective coatings.

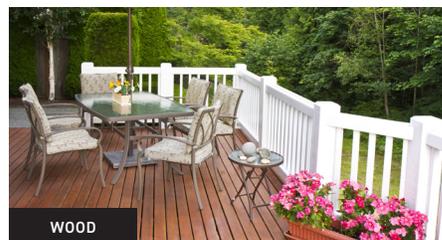
#### ► Compatibility

These colorants are compatible with most coating systems based on acrylic, latex, water-based epoxy, water borne urethane and hybrid systems. These colorants are compatible with VOC and VOC-free systems. In general, these colorants will perform well in systems having a pH of 4.5 -9.5.

#### ► Shelf Life

Proper handling is essential to maintain good quality. It is recommended that the colorants be mixed prior to use. Containers should be tightly sealed when not in use. Repacking the colorant into a smaller container should be considered if the colorant level in the container is less than 20% of the original amount and will be stored for an extended period of time.

These products must be kept from freezing and stored at temperatures above 32° F (0° C). Shelf life on these colorants in unopened containers is 1 year from the date of manufacture.



Product Code	Description	CI Name	% Pigment		% Non-Volatiles		% Volatiles		Specific Gravity	VOC <sup>a</sup> g/L	Pigment Lightfastness		Pigment Resistance	
			X Wt.	X Vol.	X Wt.	X Vol.	X Wt.	X Vol.			Mass	Tint	Acid	Alkali
50-990-150	White	White 6	63.7	30.8	3.9	6.6	32.4	62.6	1.93	<10	N	N	N	N
50-990-250	Black	Black 7	29.0	18.6	7.1	7.5	63.9	73.9	1.15	<10	N	N	N	N
50-990-350	Phthalo Blue 15:2	Blue 15:2	40.7	30.2	9.7	10.3	49.6	59.5	1.20	<10	N	N	N	N
50-990-451	Raw Umber	Brown 7	28.4	10.8	5.7	6.5	65.9	82.7	1.25	<10	**	**	**	**
50-990-550	Green 7 (Medium Shade)	Green 7	41.2	23.9	12.1	14.4	46.7	61.7	1.32	<10	**	**	**	**
50-990-751	Red 170 (Yellow Shade)	Red 170	34.9	26.7	14.4	15.4	50.7	57.9	1.14	<10	**	**	**	**
50-990-752	Quindo Red	Violet 19	41.5	31.1	7.5	8.6	51.0	60.3	1.18	<10	N	N	N	N
50-990-756	Oxide Red (Yellow Shade)	Red 101	61.2	24.1	4.7	8.4	34.1	67.5	1.97	<10	N	S	N	N
50-990-850	Yellow 151 (Green Shade)	Yellow 151	30.6	22.5	10.1	10.1	59.3	67.4	1.13	<10	N	N	N	N
50-990-851	Yellow 110 (Red Shade)	Yellow 110	37.0	23.9	11.1	12.4	51.9	63.7	1.22	<10	N	N	N	N
50-990-852	Oxide Yellow 42	Yellow 42	52.8	21.9	11.5	17.4	35.7	60.7	1.70	<10	**	**	**	**

<sup>a</sup>Typical values based on ASTM 6886

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Lightfastness and Resistance Key		
N	no bleed/discoloration	* no Florida data, only Fadeometer
S	slight	** no data
A	appreciable	

Lightfastness and Resistance information is provide for guidance purposes only.  
Source: NPIRI Raw Materials Data Handbook Volume 4 (@ 2000)



Where Art Meets Technology