

Pigment Dispersions for UV Coatings

Color Solutions

Chroma-Chem® 73 Series

General Information

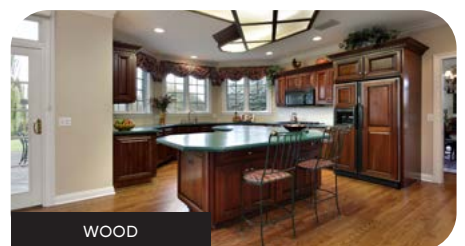
The ChromaCure™ 73 Series has been designed to provide an effective way to tint most UV and PMMA coatings. Each product is formulated with a different type of acrylic oligomer. The line provides colorants with various degrees of functionality to ensure optimal performance in most types of oligomer-based coatings.

Key Benefits

The 73 Series colorants for UV cure coatings consist of high quality organic and inorganic pigments finely milled in monomeric carriers. The selection of carriers ensures compatibility in a wide variety of UV coatings formulas and substrate requirements.

Since these colorants are based on acrylic oligomers, these colorants will be better suited for UV acrylic and PMMA coatings. These colorants have broad compatibility in coatings bases and provides a color system with excellent color performance in tinting or full pigmentation applications.

The 73 Series color pallet optimizes opacity and transparency of the pigments which are designed to provide many coating options for multiple substrates.



Properties

The 73 Series colorants consist of one of three different acrylic monomers; TMPTMA, TPGDA, or IBOA. These three monomers allow the formulator to choose the best monomer for their application based on the degree of functionality.

TMPTMA is a tri-functional monomer. TPGDA is a di-functional monomer. Finally, IBOA is a mono-functional monomer. The functionality of the monomers used in the 73 Series colorants will provide the formulator with flexibility in choosing a group of colorants that will maintain the characteristics of the base system.

The tint strength of these colorants is controlled by weight to $\pm 5\%$ to ensure optimal tinting performance for in-plant tinting. The color difference is controlled to specification ranges that are set based on human perception of various color spaces.

Applications

The 73 Series is formulated for use in many UV and reactive coatings including, but not limited to automotive, concrete protective, consumer, OEM, and wood coatings.

Compatibility

The 73 Series colorants are compatible with most monomeric coatings systems. While initially formulated for UV cure systems, these colorants are also compatible with methyl methacrylate floor coatings or wherever the monomer's double bonds can be used in the cross-linking of the coating.

The 73 Series colorants are formulated to provide excellent color control in most UV coatings systems. Due to the variety of components used in UV coatings, it is important to fully test the performance of these colorants in the finished coatings to ensure acceptable performance.

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.

Shelf life on the 73 Series colorants is 6 months from the date of manufacture in unopened containers.

Product Code	Description	CI Name	% Pigment		% Resin		% Other Non-Volatiles		Specific Gravity	VOC ^a g/L	Pigment Lightfastness		Pigment Resistance	
			X Wt.	X Vol.	X Wt.	X Vol.	X Wt.	X Vol.			Mass	Tint	Acid	Alkali
73-10452	TMPTMA White	White 6	51.0	21.2	43.9	70.6	5.1	8.2	1.70	<10	N	N	N	N
73-20308	TMPTMA Black	Black 7	14.7	9.2	71.6	76.3	13.7	14.5	1.13	<10	N	N	N	N
73-30421	TMPTMA Blue	Blue 15:2	20.0	14.3	73.7	78.9	6.3	6.8	1.14	<10	N	N	N	N
73-70641	TMPTMA Transparent Red	Red 101	27.3	9.1	62.8	78.5	9.9	12.4	1.33	<10	N	N	N	N
73-70642	TMPTMA Red	Red 170	25.3	21.2	69.7	73.1	5.0	5.7	1.12	<10	N*	S*	N	N
73-70649	TMPTMA Rubine Red	Red 57:1	31.2	24.3	63.8	69.8	5.0	5.9	1.17	<10	A	A	S	A
73-80550	TMPTMA Transparent Yellow	Yellow 42	27.5	9.6	62.4	77.8	10.1	12.6	1.32	<10	N	N	N	N
73-80551	TMPTMA Bright Yellow	Yellow 150	25.0	16.4	66.4	74.1	8.6	9.5	1.18	<10	N	N	N	N
73-80572	TMPTMA Yellow	Yellow 151	25.3	18.8	72.2	78.3	2.5	2.9	1.15	<10	N*	N*	N	A
73-02339	TPGDA HS Black	Black 7	30.0	20.1	63.0	72.1	7.0	7.8	1.20	<10	N	N	N	N
73-10420	TPGDA White	White 6	46.7	19.0	51.3	78.1	2.0	2.9	1.58	<10	N	N	N	N
73-20988	TPGDA Ultra Black	Black 7	14.2	8.8	83.4	88.8	2.4	2.4	1.11	<10	N	N	N	N
73-20989	TPGDA LV Black	Black 7	14.4	9.0	81.2	86.5	4.4	4.5	1.11	<10	N	N	N	N
73-30408	TPGDA HS Blue	Blue 15:2	25.3	18.2	73.7	80.8	1.0	1.0	1.15	<10	N	N	N	N
73-40081	TPGDA Burnt Umber	Brown 7	40.0	16.7	59.0	82.0	1.0	1.3	1.46	<10	N	N	N	N
73-40096	TPGDA Brown	Brown 7	43.2	29.2	47.7	59.6	9.1	11.2	1.30	<10	N	N	N	N
73-50212	TPGDA Green	Green 7	30.3	17.7	62.6	73.6	7.1	8.7	1.22	<10	N	N	N	N
73-70611	TPGDA Red 202	Red 202	15.0	10.1	82.0	86.7	3.0	3.2	1.11	<10	N	N	N	N
73-70643	TPGDA Red 170	Red 170	40.3	34.4	55.7	61.0	4.0	4.6	1.14	<10	N*	S*	N	N
73-70660	TPGDA Red Iron Oxide	Red 101	72.0	35.4	23.9	55.4	4.1	9.2	2.40	<10	N	N	N	N
73-80553	TPGDA Yellow Iron Oxide	Yellow 42	56.2	24.5	37.7	64.7	6.1	10.8	1.79	<10	N	N	N	N
73-02378	IBOA Black	Black 7	16.0	9.6	79.6	85.9	4.4	4.5	1.07	<10	N	N	N	N
73-10453	IBOA HS White	White 6	65.0	32.4	28.9	56.5	6.1	11.1	1.94	<10	N	N	N	N
73-70663	IBOA Red Iron Oxide	Red 101	62.0	24.6	30.9	61.8	7.1	13.6	1.98	<10	N	N	N	N
73-70690	IBOA Red 170	Red 170	40.0	33.1	56.0	62.4	4.0	4.5	1.11	<10	N*	S*	N	N

^aBased on formulation

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)

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