

# Pigment Dispersions for Solvent-Based Coatings

Color Solutions

## Chroma-Chem® UCD V

### General Information

The UCD V Line colorants have been designed for broad use in modern coatings. These products have closely controlled color strength and viscosity to permit reproducible color matches by volumetric machine dispensers or weight measurement in the plant.

#### Key Benefits

The colorant vehicle consists of a low-molecular weight, automotive type, acrylic resin dissolved in propylene glycol monomethyl ether (PM) acetate. This combination provides superior compatibility with most modern solvent-based coatings.

The UCD V colorants are thixotropic, which makes them resistant to separation by settling or syneresis. The PM acetate solvent assures long package life and freedom from caking and drying in opened containers or dispensing equipment.

The tint strength of the UCD V colorants is controlled by volume to  $\pm 2\%$  to ensure optimal tinting performance in volumetric dispensing equipment. The density and viscosity of the colorants are also tightly controlled to provide consistent in-plant tinting capabilities.



## Properties

The UCD V colorant vehicle is a nonfunctional methacrylate polymer with a tightly controlled, low molecular weight. The low molecular weight of the vehicle helps to ensure full development of pigment strength while providing a rheological profile suited to automated dispensers.

PM acetate is used as the solvent because it is not toxic and does not react with cross-linking resins such as isocyanates. Only prime pigments are included in this line's formulations; no extenders are present.

## Applications

The UCD V line is formulated for use in most solvent-based industrial coatings including, but not limited to, automotive OEM, concrete protection, general industrial finishes, general OEM, industrial maintenance, marine, and protective coatings.

## Compatibility

The UCD V colorants are compatible with most coating systems based on acrylic, nitrocellulose, alkyd, polyester, epoxy, epoxy ester, alkyd urea, alkyd melamine, urethane, modified urethane, polyester isocyanate, and vinyl. This line is also compatible with most aliphatic and aromatic hydrocarbons, esters, ethers, ketones, and reactive diluents.

## 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.

Shelf life on the UCD V line colorants is 3 years from the date of manufacture in unopened containers.

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
UCD-1072V	Micronized White	White 6	40.0	14.0	16.5	22.5	43.5	63.6	1.40	610	N	N	N	N
UCD-1106V	Titanium White	White 6	65.0	31.0	9.7	18.2	25.3	51.0	1.90	482	N	N	N	N
UCD-1507V	Carbon Black	Black 7	14.6	8.5	23.9	24.7	61.5	66.7	1.05	646	N	N	N	N
UCD-1530V	Jet Carbon Black	Black 7	6.7	3.8	24.1	24.0	69.2	72.3	1.01	699	N	N	N	N
UCD-1625V	Lampblack	Black 7	16.4	9.7	20.7	21.5	62.9	68.8	1.06	667	N	N	N	N
UCD-1635V	Medium Color Black	Black 7	18.0	10.7	19.7	20.7	62.3	68.7	1.07	665	N	N	N	N
UCD-1702V	Conductive Carbon Black	Black 7	3.5	1.9	23.4	22.9	73.1	75.1	0.99	728	N	N	N	N
UCD-1799V	Black Iron Oxide	Black 11	60.0	22.6	12.2	22.4	27.8	55.2	1.88	523	N	N	N	N
UCD-4775V	Ultramarine Blue	Blue 29	64.7	42.5	9.8	14.8	25.6	42.7	1.54	395	N	N	A	N
UCD-4800V	Phthalo Blue RS	Blue 15:2	17.0	10.5	21.3	21.8	61.7	67.7	1.05	650	N	N	N	N
UCD-4810V	Milori Iron Blue	Blue 27	21.1	13.0	23.2	24.5	55.7	62.5	1.09	605	N	A	N	A
UCD-4820V	Phthalo Blue GS	Blue 15:3	17.0	10.7	25.8	26.6	57.2	62.7	1.05	603	N	N	N	N
UCD-5100V	Chrome Oxide Green	Green 17	70.0	30.6	12.1	26.1	17.9	43.5	2.22	398	N	N	N	N
UCD-5150V	Phthalo Green BS	Green 7	25.0	13.3	17.2	18.4	57.9	68.3	1.14	660	N	N	N	N
UCD-5166V	Phthalo Green YS	Green 36	26.7	10.9	18.8	21.5	54.5	67.6	1.19	653	N	N	N	N
UCD-5643V	Bismuth Vanadate	Yellow 184	58.4	18.0	10.6	19.8	31.0	62.3	1.90	592	N	N	N	N
UCD-5675V	Diarylide Yellow	Yellow 14	18.0	11.4	20.9	19.2	61.2	69.4	0.95	581	S	A	N	N
UCD-5696V	Organic Yellow	Yellow 151	30.0	21.3	17.9	19.2	52.1	59.5	1.10	573	N*	N*	N	A
UCD-5710V	Benzidine Yellow	Yellow 17	11.0	7.1	24.2	22.1	64.8	70.8	0.92	595	S	A	N	N
UCD-5721V	Transparent Yellow Oxide	Yellow 42	27.0	8.3	21.8	25.0	51.3	66.8	1.16	596	N*	N*	N	N
UCD-5729V	Honey Yellow 29	Yellow 29	48.3	16.6	13.1	18.9	38.6	64.6	1.58	610	**	**	**	**
UCD-5739V	Organic Yellow RS	Yellow 139	20.9	14.0	22.2	23.1	56.9	62.9	1.07	607	N*	N*	N	S
UCD-5740V	High-Strength Yellow	Yellow 83	15.0	9.2	20.5	18.4	64.5	72.4	0.90	581	S	A	N	N
UCD-5744V	Irgazin Yellow	Yellow 110	10.0	5.4	22.1	22.2	67.9	72.4	1.03	701	N	N	N	N
UCD-5750V	Yellow Oxide	Yellow 42	53.5	22.1	12.2	18.9	34.4	59.2	1.63	559	N	N	N	N
UCD-5762V	Diarylide Yellow RS	Yellow 83	23.0	17.3	19.1	19.7	57.9	63.0	1.05	608	N	N	N	N
UCD-5832V	Raw Umber	Brown 7	40.7	17.1	17.2	22.5	42.1	60.5	1.38	580	N	N	N	N
UCD-5861V	Burnt Umber	Brown 7	40.0	15.5	18.3	24.1	41.7	60.4	1.39	582	N	N	N	N
UCD-5891V	Transparent Red Oxide	Red 101	20.1	5.4	30.6	32.7	49.4	61.9	1.07	529	N	N	N	N
UCD-5940V	DNA Orange	Orange 5	22.7	12.8	26.5	26.4	50.8	60.8	1.03	525	S	A	N	N
UCD-6012V	Organic Orange	Orange 34	23.0	17.0	16.3	16.8	60.7	66.3	1.05	639	A	A	N	N
UCD-6080V	Red Oxide	Red 101	62.0	24.5	12.0	21.7	26.0	53.9	1.93	504	N	N	N	N
UCD-6173V	DPP Orange	Orange 73	27.9	22.5	19.8	20.2	52.3	57.3	1.05	548	N	N	N	N
UCD-6580V	DPP Red	Red 254	40.0	29.2	15.5	17.5	44.5	53.4	1.15	513	N	**	N	N
UCD-7481V	Red	Red 48:1	24.0	13.1	22.2	21.2	53.8	65.8	0.98	526	A	A	S	A
UCD-7942V	Toluidine Red	Red 3	24.5	16.9	22.4	21.4	53.1	61.7	0.99	525	N	A	N	N
UCD-7945V	Arylide Red	Red 170	23.0	17.4	17.5	17.3	59.5	65.3	1.06	632	N*	S*	N	N
UCD-7949V	Organic Red	Red 170	33.0	24.5	17.6	18.9	49.4	56.7	1.10	546	N*	S*	N	N
UCD-7975V	Fast Red	Red 187	13.9	9.8	22.5	22.4	63.6	67.7	1.03	654	N*	S*	N	N
UCD-8030V	Quinacridone Red	Violet 19	18.0	10.8	22.8	23.4	59.2	65.9	1.06	629	S	S	N	N
UCD-8062V	BON Red	Red 48:2	23.2	15.0	21.2	22.0	55.6	63.0	1.08	603	A	A	S	A
UCD-8406V	Carbazole Violet	Violet 23	4.4	2.9	33.2	32.4	62.4	64.7	1.00	626	N	S	N	N
UCD-8443V	Quinacridone Violet	Violet 19	18.5	12.8	19.4	19.6	62.1	67.6	1.04	649	S	S	N	N

<sup>a</sup> Expected values based 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)

The information and recommendations contained herein are based on data we believe to be reliable and does not imply any warranty or performance guarantee, as conditions and methods of use of our products are beyond our control. The data herein is determined using Vibrantz's standard test methods. Hazard and safety information with respect to this product is available in the applicable SDS. Vibrantz will not be liable under any circumstance for consequential or incidental damages, including but not limited to, lost profits resulting from the use of our products