

## + Chroma-Chem® UCD® VXS

### Pigment Dispersions for Low-VOC Solvent-Based Coatings

The UCD® VXS Line colorants have been designed for broad use in low-VOC, solvent-based 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 methyl acetate and parachlorobenzotrifluoride (PCBTF). This combination provides compatibility with most modern solvent-based coatings with no added VOC's (according to the US EPA).

The UCD® VXS colorants are thixotropic, which makes them resistant to separation by settling or syneresis. The colorants contain similar components that are found in the UCD® V line colorants. However, the properties of the exempt solvents when compared to PM Acetate will mean that the colorants may perform differently than the UCD® V line colorants and are not drop-in replacements.

The tint strength of the UCD® VXS 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® VXS 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.

Methyl acetate and PCBTF are used as the solvents because they will not add VOC's to the colorants or the final coating. Only prime pigments are included in this line's formulations and no extenders are present.

#### ► Applications

The UCD® VXS line is formulated for use in most low-VOC, 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® VXS 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.

#### ► 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 due to the volatile solvents used in these colorants. 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® VXS line colorants is 2 years from the date of manufacture in unopened containers.



Product Code	Description	CI Name	% Pigment		% Non-Volatiles		% Exempt 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-1106VXS	Titanium Dioxide	White 6	61.7	31.3	8.1	13.4	30.2	55.3	2.07	<10	N	N	N	N
UCD-1625VXS	Lampblack	Black 7	16.4	11.6	19.2	26.1	64.4	62.3	1.25	<10	N	N	N	N
UCD-4800VXS	Phthalo Blue RS	Blue 15:2	17.3	14.1	22.4	22.6	60.3	63.3	1.25	<10	N	N	N	N
UCD-4820VXS	Phthalo Blue GS	Blue 15:4	16.0	13.5	29.0	25.0	55.0	61.5	1.19	<10	N	N	N	N
UCD-5150VXS	Phthalo Green BS	Green 7	22.0	13.6	23.6	25.3	54.4	61.1	1.30	<10	N	N	N	N
UCD-5696VXS	Organic Yellow	Yellow 151	25.6	20.6	16.6	16.9	57.8	62.5	1.23	<10	N*	N*	N	N
UCD-5750VXS	Yellow Oxide	Yellow 42	50.9	22.9	8.9	20.8	40.2	56.3	1.82	<10	N	N	N	N
UCD-5762VXS	Diarylide Yellow RS	Yellow 83	21.4	18.1	19.8	23.4	58.8	58.5	1.24	<10	N	N	N	N
UCD-5832VXS	Raw Umber	Brown 7	38.5	17.9	19.3	25.4	42.2	56.7	1.55	<10	N	N	N	N
UCD-5844VXS	Burnt Sienna	Brown 7	48.7	18.5	18.8	30.5	32.5	51.0	1.72	<10	N	N	N	N
UCD-5861VXS	Burnt Umber	Brown 7	34.3	14.9	18.6	24.4	47.1	60.7	1.52	<10	N	N	N	N
UCD-6012VXS	Organic Orange	Orange 34	21.2	14.8	15.8	21.4	63.0	63.8	1.23	<10	A	A	A	N
UCD-6080VXS	Red Oxide	Red 101	60.0	29.0	8.6	22.4	31.4	48.6	2.13	<10	N	N	N	N
UCD-7949VXS	Organic Red	Red 170	29.4	24.1	7.7	14.5	62.9	61.4	1.20	<10	N*	S*	N	N
UCD-8030VXS	Quinacridone Red	Violet 19	14.9	10.1	7.3	7.6	77.8	82.3	1.18	<10	S	S	N	N
UCD-8406VXS	Carbazole Violet	Violet 23	4.5	3.5	31.1	29.5	64.4	67.0	1.15	<10	N	S	N	N
UCD-8443VXS	Quinacridone Violet	Violet 19	15.6	13.2	15.6	15.8	68.8	71.0	1.22	<10	S	S	N	N

<sup>a</sup>Expected values based on the exempt status of the solvents used in these colorants

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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)



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