

# Pigment Dispersions for Water-Based Coatings

Color Solutions

## Chroma-Chem® UCD Q

### General Information

The UCD Q line colorants have been formulated for use in most alkaline water-based coatings. The colorants are based on a proprietary alkali-soluble acrylic resin and 2-butoxyethanol that provide outstanding colorant performance in tinting of in-plant coating systems.

### Key Benefits

The UCD Q Line colorants offer a combination of high quality, efficiency, and compatibility with all types of coating binders. They are extremely well-suited for tinting and full pigmentation of a variety of water-based coatings.

The UCD Q colorants are formulated with an alkali-soluble acrylic resin neutralized with dimethyl ethanol amine that was developed using automotive resin technology to ensure excellent pigment wetting with broad compatibility. These colorants will have better performance versus surfactant-based colorant systems. The co-solvent, 2-butoxyethanol, offers the benefit of excellent package stability, product deaeration, and improved coalescence.

The UCD Q colorants were one of the first colorant systems designed for universal tinting of water-based industrial coatings. With over 30 years of history, the UCD Q colorants continue to be an essential product line for tinting a wide variety of water-based industrial coatings based on most resin systems.



AUTOMOTIVE INTERIOR



INDUSTRIAL MAINTENANCE



PROTECTIVE

## Properties

The UCD Q line colorants offer the coatings formulator a product line with relatively low overall VOC levels, excellent pigment development, and rheological characteristics that contribute extraordinary stability to the colorant (resistance to flocculation, settling, and syneresis). In addition to the superior pigment development afforded by the UCD Q millbase, all colorants exhibit excellent grind, high gloss, and in-can stability.

The tint strength of these colorants are controlled by weight to  $\pm 3\%$  to ensure optimal in-plant tinting performance. Color difference is also tightly controlled to ensure lot-to-lot consistency.

## Applications

The UCD Q line is formulated for use in water-based industrial coatings including, but not limited to, automotive interior OEM, industrial maintenance, marine, and protective coatings.

## Compatibility

The UCD Q colorants are compatible with most coating systems based on acrylic, acrylic/PVA emulsions, water-reducible polyester/epoxy, water-soluble alkyd, and urethane.

## 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 Q line colorants is three years from the date of manufacture in unopened containers.

Product Code	Description	CI Name	% Pigment		% Non-Volatiles		% VOC		% Water		Specific Gravity	VOC <sup>a</sup> g/L	Pigment Lightfastness		Pigment Resistance	
			X Wt.	X Vol.	X Wt.	X Vol.	X Wt.	X Vol.	X Wt.	X Vol.			Mass	Tint	Acid	Alkali
UCD-1072Q	Micronized Titanium Dioxide	White 6	52.5	21.5	6.0	9.4	6.0	10.8	35.5	58.3	1.63	234	N	N	N	N
UCD-1106Q	Titanium White	White 6	65.0	31.4	6.7	12.4	6.6	14.1	21.7	42.1	1.93	219	N	N	N	N
UCD-1507Q	Carbon Black	Black 7	14.3	8.4	11.8	12.0	10.8	12.7	63.1	66.9	1.06	345	N	N	N	N
UCD-1530Q	Jet Carbon Black	Black 7	11.0	6.5	17.7	17.1	6.0	7.1	65.3	69.3	1.06	206	N	N	N	N
UCD-1625Q	Lampblack	Black 7	14.7	8.7	10.6	10.8	11.3	13.3	63.4	67.2	1.06	364	N	N	N	N
UCD-1635Q	Medium Color Black	Black 7	19.5	11.8	11.9	12.3	10.1	12.2	58.5	63.7	1.09	302	N	N	N	N
UCD-4820Q	Phthalo Blue GS	Blue 15:3	20.0	13.3	12.3	11.7	10.0	12.1	57.7	62.9	1.09	293	N	N	N	N
UCD-4830Q	Phthalo Blue RS	Blue 15:2	18.2	11.5	14.8	15.2	13.7	16.2	53.3	57.1	1.07	340	N	N	N	N
UCD-5150Q	Phthalo Green BS	Green 7	25.0	13.4	9.7	10.6	9.4	11.9	55.9	64.1	1.14	299	N	N	N	N
UCD-5166Q	Phthalo Green YS	Green 36	26.5	10.8	11.6	13.3	11.3	15.0	50.6	60.9	1.20	345	N	N	N	N
UCD-5675Q	Diarylide Yellow	Yellow 14	21.0	15.0	10.4	10.5	9.9	11.7	58.7	62.8	1.07	283	S	A	N	N
UCD-5696Q	Organic Yellow	Yellow 151	33.0	24.0	9.5	10.2	8.3	10.3	49.2	55.5	1.12	209	N*	N*	N	A
UCD-5729Q	Honey Yellow	Yellow 29	48.5	16.8	11.2	17.1	10.8	19.1	29.5	47.0	1.59	324	**	**	**	**
UCD-5740Q	High Strength Yellow	Yellow 83	15.0	10.7	11.1	11.0	10.6	12.3	63.3	66.0	1.04	325	S	A	N	N
UCD-5750Q	Yellow Oxide	Yellow 42	45.0	17.0	10.9	15.6	11.6	19.2	32.5	48.2	1.48	334	N	N	N	N
UCD-5832Q	Raw Umber	Brown 7	32.0	12.4	11.9	14.7	7.9	11.2	48.2	61.7	1.28	263	N	N	N	N
UCD-5861Q	Burnt Umber	Brown 7	35.0	12.9	7.7	9.5	8.5	12.6	48.8	65.0	1.33	322	N	N	N	N
UCD-5891Q	Transparent Red Oxide	Red 101	29.3	7.5	15.6	17.1	8.2	12.3	46.9	63.1	1.34	300	N	N	N	N
UCD-5940Q	DNA Orange	Orange 5	25.2	16.1	12.5	13.0	11.3	13.9	51.0	57.0	1.11	291	S	A	N	N
UCD-6012Q	Organic Orange	Orange 34	22.3	16.8	12.4	11.7	9.7	11.6	55.6	59.9	1.08	261	A	A	N	N
UCD-6080Q	Red Oxide	Red 101	55.5	20.2	9.0	15.0	8.5	16.7	27.0	48.1	1.78	291	N	N	N	N
UCD-6580Q	DPP Red	Red 254	14.3	9.5	19.5	18.9	17.9	20.8	48.3	50.8	1.05	381	N	**	N	N
UCD-7942Q	Toluidine Red	Red 3	25.4	19.0	10.0	10.3	10.0	11.9	54.6	58.8	1.07	259	N	A	N	N
UCD-7949Q	Organic Red	Red 170	25.0	18.2	9.8	10.1	9.4	11.3	55.8	60.4	1.08	256	N*	S*	N	N
UCD-7975Q	Fast Red	Red 187	14.0	10.0	11.1	11.0	10.8	12.4	64.1	66.6	1.04	334	N*	S*	N	N
UCD-8030Q	Quinacridone Red	Violet 19	17.6	10.7	10.8	11.1	10.3	12.3	61.3	65.9	1.07	324	S	S	N	N
UCD-8443Q	Quinacridone Violet	Violet 19	15.0	10.4	11.0	10.9	10.6	12.3	63.4	66.4	1.04	329	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)

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