



## UCD™ COLORANTS HS LINE

### INTRODUCTION

UCD™ HS high-solids colorants meet the increasing demand for pigmented, low-Volatile-Organic-Compound (VOC) polyurethanes to replace low-solids thermosetting acrylics in applications where exterior durability or chemical resistance requirements preclude the use of polyesters. The HS line of automotive (exterior) grade colorants is formulated at maximum loadings in a hydroxyl-functional modified-acrylic vehicle.

### COMPATIBILITY

UCD™ HS colorants are compatible with a wide variety of solvents, resins, polymers, reactive diluents, and additives.

### CHEMISTRY

The HS colorants are formulated with a hydroxy-functional acrylic resin.\* The primary solvent is methyl n-amyl ketone, which offers the benefit of low specific gravity. The end result is colorants that offer high functional reactivity for maximum resistance properties, low VOC levels, excellent pigment development, and rheological characteristics that contribute extraordinary stability to the colorant (resistance to flocculation, settling, and syneresis).

\*Equivalent weight is 400 (solids).

In addition to the superior pigment development afforded by the HS millbase, all colorants exhibit excellent grind, high gloss and transparency (organics), and high tinting strength value. Another significant feature: on average, HS colorants contain 68% less VOC than typical solvent-borne colorants. Consequently, HS colorants can be formulated into high-solids coatings containing less than 2.8 pounds of VOC per gallon.

### PROPERTIES

The tinting strength of the colorants is controlled to  $\pm 2\%$  of the standard. The color difference is controlled to less than 0.8 CIELAB units with the individual color components (DA, DB, and DL) controlled to  $\pm 0.80$  CIELAB units.

HS colorants have a viscosity range that facilitates their use in volumetric dispensing equipment.

### HANDLING AND STORAGE

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 HS line colorants is 2 years from the date of manufacture.



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			COMPOSITION											PIGMENT PERFORMANCE							
			% Pigment		% Acrylic (solids) OH No = 140		Solvent		Other Nonvolatiles		Theo. Density	% Non-volatile	VOC	Lightfastness		Bleeding				Resistance	
Code	Color	Name	Wt	Vol	Wt	Vol	Wt	Vol	Wt	Vol	Lb/Gal	(x Wt)	Lb/Gal	Mass	Tint	Oil	Spirits	Toluene	Lacquer	Acid	Alkali
1106	Titanium Dioxide	Wh 6	70.00	35.53	15.00	27.78	13.60	35.94	1.40	0.75	16.91	86.40	2.30	E	E	N	N	N	N	E	E
1514	Lampblack	Bk 7	20.00	11.55	40.00	37.93	39.10	49.74	0.90	0.78	8.67	60.90	3.39	E	E	N	N	N	N	E	E
1524	Carbon Black	Bk 7	16.30	9.25	38.24	35.60	40.80	50.75	4.66	4.40	8.51	59.20	3.45	E	E	N	N	N	N	E	E
1655	Jet Carbon Black	Bk 7	10.00	5.46	45.00	40.31	45.00	54.23	0.00	0.00	8.19	55.00	3.69	E	E	N	N	N	N	E	E
4741	Phthalo Blue GS	BI 15:4	20.00	13.03	37.69	35.30	39.06	48.91	3.25	2.76	8.56	60.94	3.34	E	E	N	N	S	N	E	E
4830	Phthalo Blue RS	BI 15:2	20.00	13.34	37.69	35.07	39.14	48.67	3.17	2.92	8.50	60.86	3.33	E	E	N	N	N	N	E	E
5150	Phthalo Green BS	G 7	25.00	13.13	37.50	37.71	34.05	45.71	3.45	3.45	9.19	65.95	3.13	E	E	N	N	N	N	E	E
5628	Novoperm Yellow	Y 139	47.50	32.93	26.25	29.03	24.20	35.74	2.05	2.30	10.11	75.80	2.45	E	E	N	N	N	N	E	E
5696	Organic Yellow	Y 151	30.00	21.45	33.70	32.42	34.35	44.22	1.95	1.91	8.79	65.65	3.02	E	E	N	N	N	N	E	G
5721	Trans. Yellow Oxide	Y 42	30.00	10.27	35.00	38.48	33.10	49.09	1.90	2.16	10.05	66.90	3.33	E	E	N	N	N	N	E	E
5750	Yellow Oxide	Y 42	50.00	18.86	25.00	34.94	23.10	43.53	1.90	2.67	12.76	76.90	2.95	E	E	N	N	N	N	E	E
5767	Paliotol Yellow	Y 153	30.00	19.89	32.55	31.87	34.75	45.51	2.70	2.73	8.95	65.25	3.11	E	E	N	S	C	N	F	F-P
5891	Trans. Red Oxide	R 101	35.00	10.05	32.50	38.81	29.50	47.51	3.00	3.63	10.91	70.50	3.22	E	E	N	N	N	N	E	E
6004	Novoperm Orange	O 36	45.00	32.67	27.50	29.12	25.45	36.00	2.05	2.21	9.68	74.55	2.46	E	G	N	N	N	N	E	E
6012	Organic Orange	O 34	30.00	22.38	33.35	31.78	34.60	43.94	2.05	1.90	8.68	65.40	3.01	G	F	N	N	S	N	E	E
6080	Red Oxide	R 101	65.00	25.94	17.50	31.86	15.90	39.19	1.60	3.01	16.62	84.10	2.64	E	E	N	N	N	N	E	E
6436	Perylene Maroon	R 179	30.00	19.62	35.00	34.84	31.76	42.18	3.24	3.36	9.10	68.24	2.89	E	E	N	S	S	S	E	E
7949	Organic Red	R 170	30.00	22.29	35.00	33.46	33.30	42.62	1.70	1.63	8.74	66.70	2.91	E	G	N	N	N	N	E	E
7971	Chromophtal Red	R 177	11.00	7.53	44.50	40.00	40.98	49.21	3.52	3.26	8.22	59.02	3.37	E	G	N	N	N	N	E	E
8000	Irgazin Red	R 254	22.50	14.87	43.75	42.18	31.82	41.07	1.93	1.88	8.81	68.18	2.80	E	E	N	N	N	N	E	E
8030	Quinacridone Red	V 19	22.00	15.01	37.60	35.09	38.45	48.05	1.95	1.85	8.53	61.55	3.28	E	E	N	N	N	N	E	E
8406	Carbazole Violet	V 23	13.50	8.75	40.00	36.06	43.05	52.00	3.45	3.19	8.23	56.95	3.54	E	E	N	N	N	N	E	E
8443	Quinacridone Violet	V 19	20.00	13.67	40.80	38.14	36.50	45.59	2.70	2.60	8.54	63.50	3.12	E	E	N	N	N	N	E	E

The performance data shown in this table are taken from the pigment suppliers' literature: E=Excellent, G=Good, F=Fair, S=Slight, C=Considerable, P=Poor, N=None

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