

PIGMENT DISPERSION DATA

GLD005018

THE GLIDDEN COMPANY

(October 13, 1967)

FROM Mr. J. G. Kingston
 Mr. M. W. Malaga DATE July 3, 1967 FOR

CITY Cleveland

ANSWERING LETTER OF

SUBJECT PIGMENT DISPERSION DATA

Information on the dispersion properties of coded pigments has been compiled in the following tables. Data was gathered by contacting each supplier and asking for his experience with his materials. In addition, Glidden's past history on pilot plant and plant batches as obtained by Mr. M. W. Malaga with these pigments is shown. In most cases there is good correlation between supplier rating and Glidden results. In a few cases there are some discrepancies. There still are many blank areas where suppliers have not sent in any information or in a number of cases, did not have any data. These will be supplemented at later dates. Data from Mr. M. W. Malaga's work has been compiled over a period of time on runs made on various pigments. If there is no number in front of the material name the product has not been coded.

Numerical values indicate Hegman (H) grind readings which can be obtained on a Cowles Disperser. Abbreviations can be identified as follows:

C - Cowles (usually refer to solvent systems)
 CS - Specifically solvent systems on Cowles
 CW - Water based dispersions on Cowles
 S - Sand Mill
 NC - Not recommended for Cowles
 NS - Not recommended for Sand Mill

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J. G. Kingston
 M. W. Malaga

JGK:MWM:cmv

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A-100 - A-299

BLUE AND VIOLET PIGMENTS

A No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
A-110	Ramapo Blue BP-366-D	DuPont	--	NC,S	-	-	-
A-111	Cyan Blue BNF 55-3750	Amer. Cyanamid	--	S	0	-	3½
A-112	Monarch Blue X-3210	Hercules			0		0
A-115	BT-284D Monastral	DuPont	--	NC,S	0	0	-
A-115	NC-X2371 Monarch Blue	Imperial (Hercules)	--	--	-	-	-
A-116	Monastral BF-BT425D	DuPont	--	NC,S	2	0	7
A-117	DCC-35432	Dominion Colour					
A-118	Monastral BT-297-D	DuPont					
A-170	Indo Blue Toner BP-258-D	DuPont					
A-171	SP Indotoner Blue B79	Harmon Colors	--	--	-	-	-
A-172							
A-173							
A-174	Indo Blue B-1	Harmon Colors	--	--	-	-	-
A-175	BP-242-D	DuPont					
A-200	Blackstone Alkalori Blue 50-4070	Amer. Cyanamid	--	S	-	-	-
A-200	C.P. Iron Blue X-2243	Imperial (Hercules)	--	--	0	-	2+
A-200	Milori Blue #4015	Reichhold	--	--	0	-	3
A-200	Milori Blue BA-9420	Holland Suco	--	NC,S	0	-	7
A-201	X-3163 Blue	Imperial (Hercules)					
A-202	Calco 50-1745 Iron Blue	Amer. Cyanamid					
A-203	Prussian Blue, A-4429	Imperial (Hercules)	--	--	-	-	-
A-204	Milori Blue 4050	Harshaw			0		6

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A No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
A-230	F2F-59-5340 Ultramarine	United Ultramarine	--	--	0	-	6
A-230	UB-5627 Ultramarine	Holland Suco	--	NC,S	-	-	-
A-231	UB-5341 Ultramarine	Holland Suco	--	NC,S	-	-	-
A-232	UB-6156 Ultramarine	Holland Suco	--	NC,S	-	-	-
A-232	#59-8460 Ultramarine	United Ultramarine	--	--	-	-	-
A-233	Ultramarine Blue UB-5050	Holland Suco	--	NC,S	-	-	-
A-233	Ultramarine Blue #59-3440	United Ultramarine	--	--	-	-	-
A-234	59-1820						
A-250	Sicilian Blue A-7020	Hercules					
A-253	Sublimed Blue Lead	Eagle Picher	--	NC	-	-	-
A-270	Fast Violet Lake B-4043	Harmon Colors	--	--	-	-	-
	BA4561 Phthalo Blue	Holland Suco	--	--	0	-	7
	BA9290 Milori Blue	Holland Suco	--	--	0	-	7+
	Iron Blue DCC-9376	Dominion Colour	--	--	0	-	2
	Milori Blue 4050	Harshaw Chem.	--	--	0	-	7
	Bahama Blue T-4564	Holland Suco	--	--	0	-	6
A-271	X-1467 Sicilian Purple	Imperial (Hercules)	--	--	-	-	-
A-273	Violet R-733-D	DuPont					
A-274	Violet Toner 49-6001	General Aniline					
A-275	Violet R Lake 49-3002	General Aniline					
	59-4961A Ultramarine Blue	United Ultramarine			0		5.5

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B-300 - B-499

BLACK PIGMENTS, DISPERSIONS, STAINS

B-No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
B-310	Carbon Black Powder	Columbian Carbon	--	--	2	2	7
B-311	Neo Spectra Mark II	Columbian Carbon	--	5-6	0	-	6
B-311	Carbolac #2	Cabot	--	--	2	-	6.5
B-312	Continex F-1	Witco	--	--	3.5	-	6.0
B-313	#607 Black Pearls	Cabot	--	NC	-	-	-
	Molacco Black Powder	Columbian Carbon	--	--	2	-	7
	Molacco LS	Columbian Carbon	--	--	2	-	6.5
	Molacco Black Beads	Columbian Carbon	--	--	0	-	0
B-315	Molacco H						
B-316	Monarch 74 Powder	Cabot	--	--	0	-	7
	Regal 300 R	Cabot	--	--	0	-	7
	Raven 40	Columbian Carbon	--	--	0	-	7
B-317	Black Pearl #81						
B-318	J-1027 Black	Harmon					
B-320	F-2347 Black	Harshaw					
B-323	Thermax	R.T. Vanderbilt	--	--	-	-	-
B-325	Texas RC-83-VP Carbon Black	Sid Richardson					
B-326	Raven Black #11	Columbian Carbon	--	--	0	-	4
B-326	Monarch #81	Cabot	--	1	0	-	6
B-340	Superba Spec. Beads	Columbian Carbon	--	--	0	-	5.5
B-340	Black Pearls 70	Cabot	--	NC	-	-	-
B-340	Texas MC-74-BD	Sid Richardson					
B-341	Neo Spectra Beads	Columbian Carbon	--	--	-	-	-
B-341	Black Pearls 46X	Cabot	--	NC	-	-	-
B-342	Raven 30 Beads	Columbian Carbon					
B-343	81X Pearl Beads	Cabot					
B-344	Raven 11 Beads	Columbian Carbon	--	--	-	-	-
B-344	Spheron #6	Cabot	--	NC	-	-	-
B-344	Texas RC-83-BD	Sid Richardson	--	--	-	-	-
B-345	Statex B12	Columbian Carbon					
B-346	Continex SRF	Witco					
B-347	Regal 330	Cabot					

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B-No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
B-410	#10273 Bone Black	Hoover Color	--	6	-	-	-
B-411	Ivo #3 Bone Black	Columbian Carbon	--	--	-	-	-
B-411	8311 Y Bone Black	Hoover Color	--	6	-	-	-
B-413	Ivo #4	Columbian Carbon					
B-414	Ivo #1	Columbian Carbon					
B-420	Graphite Powder GP-38-P9	National Carbon	--	--	-	-	-
B-421	#65 Amorphous Graphite	Pacific Graphite					
B-422	#2065 Graphite	Pacific Graphite					
B-423	#928 Graphite	Cummings Moore	--	NC	-	-	-
B-423	Super Flake	Superior Graphite	--	--	-	-	-
B-423	#85 Air Floated Graphite	Pacific Graphite	--	--	-	-	-
B-430	BTA Lampblack	Monsanto	--	--	3.5	3	-
B-431	M-1011 Jet Lampblack	C.K. Williams	--	--	2.5	0	7
B-450	Black Oxide 604	Northern Pigment	--	--	0	0	6
	Carbolac 46 Powder	Cabot	--	--	2.5	-	6.0
	Monarch 71 Powder	Cabot	--	--	0	-	6.5
B-451	#724 Black Oxide	Reichard Coulston					
B-452	#1843 Black Oxide	Reichard Coulston	--	3-3.5	-	-	-
B-453	Mapico Black	Columbian Carbon	--	--	0	-	7
	F-1335 Black	Ferro Corporation	--	--	-	-	-
B-455	F-2302						
B-460	Norit A	Amer. Norit Co.					
	Keystone Filler	Penn Paint & Filler	--	--	-	-	-
B-462	Acetylene Black 50% Comp.	Shawinigan Prod.	--	--	-	-	-
B-463	Antimony Black #1	Rare Metal Products	--	--	-	-	-
B-464	Micalith "G"	English Mica	--	--	-	-	-
	Regal 300 R	Cabot			-	-	7
	Carbolac 46	Cabot			2.5	-	6.0
	Raven 40	Columbian Carbon			-	-	7
	Monarch 71	Cabot		GLD 005023	-	-	6.5

D-100 - D-299

BROWN PIGMENTS

D No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
D-110	#9124 Hoover Brown	Hoover Color	--	6	-	-	-
D-111	BU-5250F Umber	Chas. Pfizer	--	7	-	-	-
	Raw Umber 1044	Reichard Coulston	--	--	5.5	-	5
	Burnt Umber 14	Reichard Coulston	--	--	4	-	5
	Metallic Brown 1681	Reichard Coulston	--	--	6	-	6
	Mapico Brown 418	Columbian Carbon	--	--	1	-	7
	Mapico Brown 419	Columbian Carbon	--	--	1	-	7
	Mapico Brown 420	Columbian Carbon	--	--	1	-	7
	Mapico Brown 421	Columbian Carbon	--	--	0	-	7
	Mapico Brown 422	Columbian Carbon	--	--	0	-	7
	Mapico Tan 15	Columbian Carbon	--	--	0	-	7
D-112	Burnt Umber J 4685	Mineral Pig. Corp.					
D-113	Burnt Umber #513	Imperial (Hercules)	--	--	2	-	-
D-113	OB Burnt Umber	J. Lee Smith	--	--	-	-	-
D-114	Burnt Umber BU-7052						
D-130	#775 Raw Umber	Reichard Coulston	--	4	0	0	5
D-131	#9123 Hoover Brown	Hoover Color	--	6	-	-	-
D-140	Burnt Sienna #904	Reichard Coulston	--	1-2	-	-	-
D-141	Burnt Sienna #1041	Reichard Coulston	--	1-2	-	-	-
D-142	Burnt Sienna BS-6653-F	Chas. Pfizer					
D-143	Burnt Sienna J-4586	Mineral Pig. Corp.					
D-144	Burnt Sienna #845	Reichard Coulston	--	3	-	-	-
D-161	Raw Sienna RC 451	Reichard Coulston	--	3	-	-	-
D-161	Raw Sienna WS	Imperial (Hercules)	--	--	-	-	-
D-161	Raw Sienna RS 0362	C.K. Williams	--	--	3.5	-	4
	Raw Sienna RS 2867	C.K. Williams	--	--	6+	-	6
D-162	#1169 Raw Sienna	Reichard Coulston					
D-163	Raw Sienna #482	Reichard Coulston					

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D No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
D-170	Mapico Tan #20	Columbian Carbon	--	--	3	-	6.5
D-171	1373 Van Dyke Brown	Reichard Coulston	--	0	-	-	-
D-172	#780 Brown Iron Oxide	Imperial (Hercules)	--	--	-	-	-
D-173	#762 Brown	Reichard Coulston	--	5	-	-	-
D-174	B-3394 Brown Oxide	Chas. Pfizer					
D-175	B-1804 Brown Oxide	Chas. Pfizer					
D-179	#759 Brown	Reichard Coulston	--	--	-	-	-
D-180	VVF, B2093F Metallic	C.K. Williams	--	--	6.5	-	6.5
D-181	B-2390 Metallic Brown	C.K. Williams					
D-182	Metallic Brown B-5888	C.K. Williams					
D-183	L-439 Erco	Reichard Coulston	--	7.5	-	-	-
-184	M-440 Erco	Reichard Coulston					
D-185	#613-B Brown Oxide	Imperial (Hercules)	--	--	6.5	-	6.5
D-185	575 Brown Oxide	Reichard Coulston	--	--	-	-	-
D-186	B-3881 Brown Oxide	Mineral Pig. Corp.					
D-187	#1182 Brown Oxide	J. Lee Smith					
D-188	Mapico Brown #418	Columbian Carbon					
D-189	Mapico 420	Columbian Carbon					
D-190	Mapico Tan #15	Columbian Carbon					
D-191	F 6115 Dark Buff	Ferro Corporation	--	--	-	-	-
D-192	Reco #420 Brown	Reichard Coulston					
D-194	Metallic Brown 1806	Reichard Coulston	--	3	-	-	-
D-194	Metallic Brown 1105	Imperial (Hercules)	--	--	-	-	-
D-194	Metallic Brown 84-G.G.	Prince Manufacturing	--	--	-	-	-
D-195	Metallic Brown B-3093	C.K. Williams	--	--	4	2	4.5
D-196	Metallic Brown B-4075	C.K. Williams	--	--	-	-	-
J-212	Bontone Brown Y-1162	Harshaw Chemical	--	--	-	-	-
D-213	Ginger Brown T-59B2	Harmon Color					

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G-700 - G-799

GREEN PIGMENTS

G No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
G-710	Chrome Green #10-8100	Amer. Cyanamid	--	--	0	-	6.
G-710	Chrome Green #8862	Kentucky Color	--	NC,S	-	-	-
G-710	Chrome Green #4258	W.R. Eakins	--	--	4+	0	6.5
G-710	Chrome Green #01846	Reichhold	--	--	0	0	-
G-710	Chrome Green #1249	Western Dry Color	--	--	-	-	-
G-710	Chrome Green DCC-4700	Dominion Colour	--	--	-	-	-
G-720	Norwood Green M10-8505	Amer. Cyanamid	--	S	0	0	2
G-720	C-359	Imperial (Hercules)	--	--	-	-	-
G-720	DCC-4900	Dominion Colour	--	--	-	-	-
G-721	Softex #8915	Harshaw Chemical	--	--	-	-	-
G-722	#11235	Sherwin Williams	--	--	-	-	-
G-740	Norwood Green D-10-8705	Amer. Cyanamid	--	S	0	-	0
G-740	DCC-4975	Dominion Colour	--	--	-	-	-
G-741	Velvet Green DDD A 4469	Imperial (Hercules)	--	--	-	-	-
G-750	Chrom. Oxide G6099	Chas. Pfizer	--	--	2.5	-	7
G-750	Chrom. Oxide J5351	Mineral Pig. Corp.	--	--	3	-	7
G-750	Chrom. Oxide X1134	Imperial (Hercules)	--	--	-	-	-
G-751	Permanent Green X1284	Imperial (Hercules)	--	--	-	-	-
G-760	Phthalo. Green GT-674-D	DuPont	--	--	0	-	7
G-760	Phthalo. Green 48-238	Federal Color Lab.	--	--	0	-	6.1
G-760	Phthalo. Green 15-3100	Amer. Cyanamid	--	S	-	-	-
G-760	Phthalo. Green GT-422	Holland Suco	--	NC,S	3	3	-
G-760	Phthalo. Green G4-7039	Ansbacher Siegle (Sun Chem.)	--	6	-	-	-
G-761	Monastral Green GT-751-D	DuPont	--	--	-	-	-
G-780	Olive Drab #3753						
	BA-4804 Phthalo. Green	Holland Suco	--	--	0	-	7.1
	Chrome Green A-4443	Imperial (Hercules)	--	--	-	2.5	-
	Lt. Chrome Green DCC-9426	Dominion Colour	--	--	0	-	7
	Lt. Chrome Green DCC-9427	Dominion Colour	--	--	0	-	6
	Med. Chrome Green DCC-9431	Dominion Colour	--	--	0	-	6
	Dk. Chrome Green DCC-9436	Dominion Colour	--	--	0	-	5
	Fastolux Green 64-8142	Sun Chemical	--	--	0	-	5.1
	Fastolux Green 64-8129	Sun Chemical	--	--	0	-	6.1
G-785	Olive Drab 5705	Mineral Pig. Corp.	--	--	-	-	-
	DK Chrome Green GT-9851	Holland SUCO			3 1/2		7

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L-100 - L-499

YELLOW AND ORANGE PIGMENTS

L No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
L-110	Chrome Lt. Yell. Y-434D	DuPont	--	C,S	4	-	7
L-110	Chrome Lt. Yell. C-202	Imperial (Hercules)	--	S	6	-	7+
L-110	Chrome Lt. Yell. #2701	Kentucky Color	--	NC,S	-	-	-
L-110	Chrome Lt. Yell. 40-3615	Amer. Cyanamid	--	S	5	-	7
L-110	Chrome Lt. Yell. 1069	Reichhold	--	--	-	-	-
L-110	Chrome Lt. Yell. DCC-1026	Dominion Colour (Can.)	--	--	-	-	-
L-110	Chrome Lt. Yell. J-1222	Mineral Pig.	--	--	3	-	7
L-111	Y-433D Chrome	DuPont	--	--	--	--	--
L-112	DCC-1034	Dominion Colour	--	--	--	--	--
L-113	09-425	Hercules	--	--	--	--	--
L-114	Regal Yellow Lt. X2777	Imperial (Hercules)	--	S	-	-	-
L-115	Primrose Yellow Y-758-D	DuPont	--	--	-	-	-
L-115	Primrose Yellow 40-1465	Amer. Cyanamid	--	S	2.5	-	7
L-116	Softex 3-0	Harshaw	--	--	--	--	--
L-118	Chrome Orange X 819	Imperial (Hercules)	--	--	0	-	7
L-119			--	--	--	--	--
L-130	Regal Yellow X-3218	Imperial (Hercules)	--	--	--	--	--
L-130	Yellow 12-D	Mineral Pigments	--	--	--	--	--
L-131	Chrome Yell. #1245	Mineral Pig. Corp.	--	--	-	-	-
L-131	Chrome Yell. X-1810	Imperial (Hercules)	--	S	4.5	-	-
L-131	Chrome Yell. #1290	Reichhold	--	--	-	-	-
L-131	Softex RX 2623	Kentucky Color	--	C,S	-	-	-
L-131	Spray Dry Chrome Yell.	W.R. Eakins	--	--	2 1/2	-	2 1/2
L-132	09-320		--	--	--	--	--
L-133	C.P. Chrome Y-661-D	DuPont	--	C,S	-	-	-
L-133	40-4500 Chrome	Amer. Cyanamid	--	--	--	--	--
L-134	Regal Yell. Med. X-2778	Imperial	--	--	-	-	-
L-135	Yellow F.G. X-2699	Imperial	--	--	-	-	-
L-136	Softex 4-0		--	--	--	--	--
-137	Softex 1-0		--	--	--	--	--

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L No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
L-138	Chrome Med. Yell. #2150	W.R. Eakins	--	--	5.5	-	7
L-138	Chrome Med. Yell. Y-469	DuPont	--	C,S	-	-	-
L-138	Chrome Med. Yell. J-469	Amer. Cyanamid	--	S	2	-	7
L-138	Chrome Med. Yell. 1087	Reichhold Coulston	--	--	-	-	-
L-138	Chrome Med. Yell. X2501	Imperial	--	S	6.5	-	7.5
L-138	Chrome Med. Yell. DCC-1091	Dominion Colour	--	--	-	-	-
L-138	Chrome Med. Yell. J-1238	Mineral Pig. Corp.	--	--	6.5	-	7+
L-138-b	Chrome Med. Yell. J-1238	Reichhold Chem.					
L-139	#1299 Chrome Yellow	Reichhold					
L-140	09-435 Regal Yellow	Imperial (Hercules)					
L-141	#2101 Chrome Yellow	Harshaw					
L-142							
L-143	DCC-1091	Dominion Colour	--	--	-	-	-
L-143	Y-493-D	DuPont					
L-143	#3950	Harshaw					
L-143	J-1217	Mineral Pig. Corp.					
L-143	X-2891	Hercules					
L-144	09-710	Hercules					
L-145							
L-146	#1298 Chrome	Reichhold					
L-175	Zinc Chromate X2259	Imperial	--	--	-	-	-
L-175	Zinc Chromate Y563-D	DuPont	--	--	-	-	-
L-175	Zinc Chromate 1345	Mineral Pig. Corp.	--	--	6	-	7
L-175-b							
L-176	J 1310 Pure Zinc Yell.	Mineral Pig. Corp.					
L-177	Zinc Chromate Y 539-D	DuPont	--	--	6	-	7
L-177	Zinc Chromate 1310	Mineral Pig. Corp.	--	--	5	-	5.5
L-177	Zinc Chromate 1425 C.D.	Reichhold	--	--	-	-	-
L-177	Zinc Chromate X2127	Imperial	--	--	3	-	6+
L-177	Zinc Chromate Spray Dry	W.R. Eakins	--	--	4.5	-	7
L-180	Barium Chromate #2825	Harshaw					
L-181	#1376 Calcium Chromate	Mineral Pig. Corp.	--	--	-	-	-
L-182	61-100						
L-183							
L-183	2821 Strontium Chromate	Harshaw					
L-183	Jet Milled Zinc Yellow	Mineral Pigments			6		7
	J-1312						

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L No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
L-190							
L-191	Prim rose Cadmolith 300	Baltimore Pig.	--	--	-	-	-
L-192	Golden Cadmolith 320	Baltimore Pig.	--	--	-	-	-
L-193							
L-206	605N						
L-207	Mapico Lemon IO-NP	Columbian Carbon	--	--	-	-	-
L-208	Mapico IO Low Opacity	" "			0		7+
L-209	Mapico Yellow Lemon LO	Columbian Carbon	--	--	3.5	3	7
L-209	2288B YLO Yell. Iron Ox.	C.K. Williams	--	7.5-8	5.5	-	7
L-209	RC 201 Ferrite Yell.	Reichard Coulston	--	7.5-8	5.5	-	7
L-211	Lemon Yellow Oxide 1102 207ED	Mineral Pigments			4 $\frac{1}{2}$		6 $\frac{1}{2}$
L-212	Yellow Oxide YO-3587	C.K. Williams	--	--	5	-	7
L-212	N Lt. Orange Normal 602	Reichard Coulston	--	7.5	5.5	-	7
L-212	Mapico Yellow Orange	Columbian Carbon	--	--	6 $\frac{1}{2}$	-	7+
L-213							
L-250	Molybdate Orange YE698D	DuPont	--	C,S	-	-	-
L-250	#2527 Ming Orange E.D.	Kentucky Color	--	NC,NS	-	-	-
L-250	X-2806 Rex Orange	Imperial	--	--	6	-	7
L-250	DCC-1607	Dominion Colour	--	--	-	-	-
L-250	3427 Molybdate Orange	W.R. Eakins	--	--	-	-	-
L-251	Orange Pigment MO YE637D	DuPont	--	C,S	7	-	7
L-251	Molybdate Orange O-1847	Reichhold	--	--	-	-	-
L-251	Valencia Orange 40-8280	Amer. Cyanamid	--	S	-	-	-
L-251	K 2525	Kentucky Color	--	NC,S	-	-	-
L-251	Rex Orange X 2836	Imperial	--	--	5.5	-	7
L-251	DCC-1608	Dominion Colour	--	--	-	-	-
L-252							
L-253	YE-765-D						
L-254	X2348 Rex Orange	Imperial			0		7+
L-255	X2861						
L-256	Softex Ming Orange 2-5	Kentucky Color	--	--	-	-	-
L-257	Y-721-D						
L-300	DCC-710						
	Titanium Yellow	Glidden		GLD005029	7.5		8

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<u>L No.</u>	<u>Material</u>	<u>Supplier</u>	<u>Micron Size</u>	<u>Supplier Informat</u>	<u>Glidden</u>		
					CS	CW	S
L-301	Horicon Yellow X1351	Imperial	--	--	-	-	-
L-302	DCC-1102						
L-303	DCC-1103						
L-304	Empress Yellow X2846	Imperial	--	--	0	-	7
L-304	Permanse Yell. 12186-A	Sherwin Williams	--	--	0	-	7.5
L-304	Sunglow Yell. 1235 (3D-1840)	Kentucky Color	--	NC,8	-	-	-
L-309	DCC-1109						
L-340							
L-344	Sun Yellow N	Harshaw	--	NC,8	-	-	-
L-345	Sun Yellow C	Kentucky Color	--	NC,NS	-	-	-
L-346	Sun Buff						
L-349	Green Gold YT 562-D	DuPont	--	NC,8	-	-	-
L-351	Y5760						
L-352	Y5743						
L-353	R45-7005						
L-354							
L-355							
L-357							
L-358							
L-360	X917						
L-361	Orange Lake X1219	Imperial	--	--	-	-	-
L-363	A-4462 Orange Toner	Kohnstamm					
	Mapico Yellow	Columbian Car.			0		7+
	Low Opacity						

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N-100 - N-999

INERT PIGMENTS.

N No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
N-113	Atomite	T. Weinman	--	6-6.5	6.5	-	7+
N-113	Micro White #25	Sylacauga	--	6-6.5	6	-	7
N-113	Camel White	H.T. Campbell	2-8	6-6.5	6	6	-
N-113	Gamaco #6532	Georgia Marble	--	--	6.5	6.5	-
N-114							
N-117							
N-120							
N-121	Cameltex	H.T. Campbell	2-20	4-4.5	5	-	5
N-121	Calwhite	Georgia Marble	--	--	5.5	-	-
N-121	Micro White #50	Sylacauga	1-30	5-5.5	-	-	-
N-121	Snowflake	T. Weinman	--	4.5	6	6	6.5
N-123							
N-125	Duramite						
N-127	45-3 Albacar CaCO ₃	C.K. Williams	--	--	4	-	4
N-138	Drikalite	T. Weinman	--	3.5-4	-	-	-
N-142	C-55 - CaCO ₃	H.T. Campbell	2-44	2-2½	2	2	-
N-142	#1 Whiting	Thompson Weinman					
N-142	#10 Whiting	Georgia Marble					
N-146	Commercial Whiting	C.A. Wagner	--	NC, NS	-	-	-
N-148	#8 White CaCO ₃	Georgia Marble	--	--	-	-	-
N-152	Multifex MM	Diamond Alkali	.03-.15	NC, S	8	8	-
N-155	Carbium MM	Diamond Alkali					
N-157	Whitcarb W	Witco (Wyandotte)	--	--	-	-	-
N-161	Surfex MM	Diamond Alkali	.05-1	C, S	7	-	-
N-211	Hydrite UF						
N-213	ASP-170	Minerals & Chem.					
N-214	ASP-100	Minerals & Chem.	--	--	8	8	8
N-215	Hydrite 10	Georgia Kaolin	--	5-6	0	-	-
N-217	ASP-200	Minerals & Chem.					
N-219	ASP-600	Minerals & Chem.	--	--	-	-	-
N-220	Hydrite R	Georgia Kaolin	--	2.5 (Solv.)			

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N No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
N-222							
N-223	ASP-900	Minerals & Chem.	--	--	2	-	-
N-228	ASP-400	Minerals & Chem.	--	--	5.5	5	5.5
N-228	Al-Sil-Ate LO	Freeport Kaolin	--	--	-	-	-
N-232	Hydrite MP	Georgia Kaolin	--	4-5	4	-	5.5
N-235	Iu Fil	United Clay Mines	--	NC,NS	-	-	-
N-238	#6 Talc	C.A. Wagner	--	NC,NS	-	-	-
N-238	#6 Talc	R.T. Vanderbilt	--	--	-	-	-
N-254	Kaollid Clay 10978	T. Weinman	--	3.5	-	-	-
N-257	Unimal 503						
N-262	Al-Sil-Ate W	Freeport Kaolin	.7-7	4.5	-	-	-
N-262	Glomax LL	Georgia Kaolin	--	--	-	-	-
N-262	Satintone #1	Minerals & Chem.	--	--	-	-	-
N-276	Al-Sil-Ate NC	Freeport Kaolin	.2-4	--	0	-	-
N-278	Optiwhite	Burgess Pig.	--	--	4	-	4.5
N-282	ASP-101	Minerals & Chem.	--	--	6.5	5.5	7
N-285	ASP-103	Minerals & Chem.	--	--	3	-	3
N-317	Santocel FR-C	Monsanto	.01-.02	--	-	-	-
N-329	Cab-O-Sil M5	Cabot	.015-.02	--	-	-	-
N-340	H1-Sil 233						
N-341	H1-Sil 422						
N-351	400 Mesh Silica						
N-353							
N-356	Superwhite Silica	C.K. Williams	--	--	1 1/2	0	2
N-356	#39 Silica	C.A. Wagner	--	--	-	-	-
N-356	Velveteen F	Tamms	1-53	--	-	-	-
N-356	Becco #410	H.B. Browning	--	--	-	-	-
N-356	#1160 Silica	Innes Speiden	--	--	-	-	-
N-356	R.D. 2	Illinois Mineral	--	--	1	-	4
N-362	Silver Bond B Silica	Tamms	3-44	--	-	-	-
N-364							
N-366	Supersil #325	Pennsylvania Glass	--	--	1.5	-	3
N-368							

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<u>N No.</u>	<u>Material</u>	<u>Supplier</u>	<u>Micron Range</u>	<u>Supplier Informat</u>	<u>Glidden</u>		
					CS	CW	B
N-370							
N-371							
N-373							
N-375							
N-377							
N-379							
N-382							
N-384							
N-386	Celite #266	Johns-Manville	--	--	5	5	6.5
N-388							
N-389							
N-391							
N-393							
N-413	#399 Magnesium Silicate	Whittaker Clark	--	6.5	7.5	6.5	8
N-413	Mistron Monomix	Sierra Talc	--	--	6	-	6.5
N-415	Mistron Vapor						
N-419	#425 Asbestine	Internat. Talc	1-20	5-5.5	5.5	5.5	-
N-419	Nytal 400	R.T. Vanderbilt	1-10	--	-	-	-
N-423	Mistron T-076	Sierra Talc	.5-10	5.6	6	-	6.5
N-429	Mistron 139	Sierra Talc	--	--	-	-	-
N-436	Fibrene C 500	Sierra Talc	1-30	3-4	-	-	-
N-439	Nytal 300	R.T. Vanderbilt	1-30	--	5	5	5
N-439	325 Asbestine	Internat. Talc	1-30	4-4.5	4	-	-
N-439	Fibrene C 400	Sierra Talc	1-44	2-3	3	-	-
N-439	#54 Desert Talc	Desert Minerals	--	--	-	-	-
N-440	#2620 Talc	Whittaker Clark	--	4	3	-	-
N-441							
N-443	Silverbow 500						
N-445	5X Asbestine	Internat. Talc	1-44	0-1	4.5	-	4.5

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N No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
N-447	3X Asbestine	Internat. Talc	1-44	0-1	2	-	3
N-449	Nytel 200	R.T. Vanderbilt	2-44	--	2	1½	-
N-449	Asbestine FT	Internat. Talc	1-44	1-2	-	-	-
N-440	Fibron G-400	Sierra Talc	1-44	--	-	-	-
N-449	Cal Fibre	Southern Cal.	--	--	-	-	-
N-445	5X Asbestine	Internat. Talc	1-44	0-1	4.5	-	4.5
N-450	1767 Talc	Whittaker Clark	--	--	3.5	3	4
N-452	Talc "A"	Georgia Talc	--	--	2.5	-	2.5
N-452	Talc "A"	Stoller Chem.	--	--	-	-	-
N-463	Mistron MSC	United Sierra					
N-501							
N-503	Barytes W-1430-F	C.K. Williams	--	--	6.5	-	7
N-505							
N-507	#22 Barytes	T. Weinman	--	2-2.5	-	-	-
N-510	Barytes	Nat. Lead	--	--	3.5	6	3.5
N-510	Barytes	C.K. Williams	--	--	4.5	-	5.5
N-512							
N-521							
N-523							
N-525	Micro-Cel E	Johns-Manville	--	--	0	-	5
N-526	Micro-Cel T-38	Johns-Manville					
N-527	Micro-Cel C	Johns-Manville	--	--	1	-	4.5
N-531	Cab-O-Lite F1	Cabot	--	--	3	3	3.5
N-541	Mica C 3000	Witeco	--	5-6	6	5.5	-
N-541	Mica C 3000	English Mica	--	--	5	-	5
N-543							
N-545	#12 Alsibronz	Franklin Mineral					
N-548	Mica 3X	Mineralite Sales	--	--	0	-	2.5
N-564	Calcium Sulphate	Nershaw	--	--	2	-	3.5

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R-500 - R-799

RED PIGMENTS, DISPERSIONS, STAINS

<u>R No.</u>	<u>Material</u>	<u>Supplier</u>	<u>Micron Range</u>	<u>Supplier Informat</u>	<u>Glidden</u>		
					<u>CS</u>	<u>CW</u>	<u>S</u>
R-500	Kroma Red RO-3097	C.K. Williams	--	--	6	6	-
R-500	Softex Red 1400	Reichard Coulston	--	7.5-8	-	6.5	7.5
R-501	Indian Red Iron Oxide R-5098	C. K. Williams	--	--	5	-	7
	6406 Red Oxide	Northern Pig.	--	--	2.5	-	4
	555 Red Oxide	Northern Pig.	--	--	0	-	5.5
	Para Red Toner DCC-9130	Dominion Colour	--	--	0	-	6.5
	Lithol Red DCC-9201	Dominion Colour	--	--	0	-	5
	Para LT Red DCC-9126	Dominion Colour	--	--	0	-	7+
	Naphtol LT Red DCC-9226	Dominion Colour	--	--	0	-	7
R-502	Mapico Red #516	Columbian Carbon	--	--	1	-	6
R-503	Mapico Crimson #98	Columbian Carbon	--	--	4.5	-	6.5
R-503	Iron Oxide RY-8095	C.K. Williams	--	--	5	-	6.5
R-504	516 Mapico	Columbian Carbon	--	--	4.5	-	7
R-504	Indian Red RY-5095	C.K. Williams	--	--	0	-	6
R-506	Indian Red R-8099	C.K. Williams	--	--	4	-	7
R-506	Indian Red #1829	Reichard Coulston	--	6	6	-	6+
R-507	Ferrite Red #405	Northern Pig.	--	--	0	-	5.5
R-508	Kroma Red RO-8097	C.K. Williams	--	--	6.5	6	7
R-508	Softex Red 1445	Reichard Coulston	--	7.5-8	-	6.5	7.5
R-509	Red Oxide R2899	C.K. Williams	--	--	4.5	-	7
R-509	Mapico Red 344	Columbian Carbon	--	--	-	-	-
R-510							
R-511	Mapico Red #110	Columbian Carbon	--	--	0	-	2.5
R-511	Red Iron Oxide R-4098	C.K. Williams	--	--	0	-	7
R-512	Indian Red R 9998	Hoover Color	--	--	5	-	6.5
R-513	Red Oxide J-3110	Mineral Pigments	--	--	-	-	-
R-514	Softex Red 1440	Reichard Coulston	--	7.5-8	-	-	-
R-515	Irox Red 1360	Reichard Coulston	--	7.5-8	7.5	-	7.5
R-516	Red Oxide J-3106	Mineral Pigments	--	--	-	-	-
R-517							

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R No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		S
					CB	CW	
R-518	#6406 Special Oxide						
R-519	RO-6097						
R-520							
R-521							
R-522	#1640 Red Oxide	Reichard Coulston			6.5-7		7
R-523	N-5290						
R-524	R-6145						
R-525	MP-555	Northern Pigments	--	--	-	-	5.5
R-526	#1681 Red Oxide (Nub.)						
R-530							
R-531	Red Oxide N-7094	C.K. Williams	--	--	-	-	-
R-532	Red Oxide NR 4284	C.K. Williams	--	--	4	-	5
R-533	Maroon Oxide 1871	Reichard Coulston	--	5	5	-	5
R-534	Red Oxide N-5785	C.K. Williams	--	--	5	-	5.5
R-535							
R-536	Red Oxide N-4485	C.K. Williams	--	--	3.5	-	6.5
R-538	Maroon Oxide 1683	Reichard Coulston	--	4.5-5	-	-	-
R-539	Red Oxide 1836	Reichard Coulston	--	6	5	-	6
R-545	#879 Red Oxide	Reichard Coulston	--	3	-	-	-
	#533 Red Oxide	Northern Pigment	--	--	0	-	5
	Brown Iron Oxide B-2094	C.K. Williams	--	--	7	-	7+
	Red Oxide RO-6097	C.K. Williams	--	--	3	-	7
	Red Oxide RO-5097	C.K. Williams	--	--	4	-	6
	Red Oxide RO-4097	C.K. Williams	--	--	0	-	7
R-546	Iron Ore B-01085	C.K. Williams	--	--	-	-	-
R-546	Iron Ore 909	Reichard Coulston	--	--	3.5	-	4
R-547	#680 Red Oxide	Tamms	--	6	-	-	-
R-548	Super Aetna Red Oxide	Reichard Coulston	--	3	3	0	3.5
-548	N-3872 Persian Gulf	C.K. Williams	--	--	4	-	5
R-548	Super V Persian Gulf	Imperial (Hercules)	--	--	-	-	-
R-548	Persian Gulf Oxide	H.L. Blackford (Can.)	--	--	-	-	-

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R No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
R-556							
R-557	Venetian Red #1183 or 83	Reichard Coulston	--	3	-	-	-
R-558	V 11040 Venetian Red	C.K. Williams	--	--	4.5	-	6.5
R-558	1135 Venetian Red	Reichard Coulston	--	3	-	-	-
R-559	Tuscan Red #3675	Hoover Color	--	6	-	-	-
R-560	Tuscan Orange 10395	Hoover Color	--	--	-	-	-
R-561	Tuscan Red #10279	Hoover Color	--	--	-	-	-
	Red Iron Oxide 1203	Imperial	--	--	6.5	-	7+
	Red Iron Oxide 1201	Imperial	--	--	6.5	-	7+
	Indian Red Oxide 1205	Imperial	--	--	6.5	-	7+
	Indian Red Oxide 1204	Imperial	--	--	6	-	7+
	Molara Red Toner R-6306	Holland Suco	--	--	0	-	7.5
	BON Maroon DCC-9477	Dominion Colour	--	--	0	-	6
	Red Iron Oxide 1200	Imperial	--	--	6.5	-	7
R-562							
-565	Red Lead 95 Grade	National Lead	--	--	-	-	-
R-565	Red Lead 95 Grade	Eagle Picher	.12-16	C	-	-	-
R-565	Red Lead 95 Grade	Hammond Lead	--	C,8	-	-	-
R-566	Red Lead 97 Grade	National Lead	--	C,8	-	-	-
R-566	Red Lead 97 Grade	Eagle Picher	.12-16	C	-	-	-
R-566	Red Lead 97 Grade	Hammond Lead	--	--	-	-	-
R-567	Cuprous Oxide AA	Glidden-Hammond	--	--	-	-	-
R-568	Cuprous Oxide A	Glidden-Hammond	--	--	-	-	-
R-569							
R-570	Lead Silico Chromate M50	National Lead	--	--	-	-	-
R-570	Permex 1-4-3	Eagle Picher	.03-32	C	-	-	-
R-571							
R-600	Cadmium Red 200	Baltimore Pig.	--	--	-	-	-
R-601	Cadmium Red 210	Baltimore Pig.	--	--	-	-	-
R-602	Cadmium Red 220	Baltimore Pig.	--	--	-	-	-
R-603	Cadmium Red 230	Baltimore Pig.	--	--	-	-	-

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R No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
R-604							
R-605	#18410 Maroon	Harshaw					
R-611	Alizarine Maroon X-1550	Imperial (Hercules)	--	--	-	-	-
R-614							
R-620	Benson Red #1082	Kentucky Color	--	NC,NS	-	-	-
R-621	BON Red RT-565-D	DuPont	--	NC,S	-	-	-
R-622	Maroon Gold RT-608-D	DuPont	--	--	-	-	-
R-623	BON Maroon RT-533-D	DuPont	--	NC,S	-	-	-
R-624							
R-625	BON Red RT-525-D	DuPont	--	NC,S	-	-	-
R-627							
R-628							
R-629							
R-630	Victoria Maroon MB3	Harmon Color	--	--	-	-	-
R-650							
R-652	DCC-6075						
R-661	Garnet Toner X-2433	Imperial (Hercules)	--	--	-	-	-
R-662	Lithol Toner 20-4180	Amer. Cyanamid	--	S	-	-	-
R-662	Lithol Toner X-1096	Imperial (Hercules)	--	--	0	-	7+
R-662	Lithol Toner RA-2260	Holland Suco	--	NC,S	-	-	-
R-663	Macatawa Red RT-421	Holland Suco	--	NC,S	-	-	-
R-664	643K Litho Rubine						
R-667	Calcium Lithol Toner 20-4662	Amer. Cyanamid	--	S	5	-	7
R-667	Calcium Lithol Toner X-1666	Imperial (Hercules)	--	--	0	-	7.5
R-668	VAT Red Violet 14-4100	HostaPerm			0		7
	VAT Red Violet 14-4008	HostaPerm			0		6.1

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R No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
R-670	Lithol Rubine X-2028	Imperial (Hercules)	--	--	0	-	7+
R-670	Lithol Rubine 19-4208	Ansbacher Siegle	--	--	-	-	-
R-671	Harmon Lithol Toner in heavy	Amer. Cyanamid	--	S	-	-	-
R-672	Pera Toner V20-1350	Amer. Cyanamid	--	S	-	-	-
R-673	Pera Toner X 1481 G-3111	Imperial (Hercules)	--	--	-	-	-
R-674	Pera Toner B20-2814	Amer. Cyanamid	--	S	-	-	-
R-674	Pera Toner A-1757	Imperial (Hercules)	--	--	-	-	-
R-675	Parachlor Red RT-407-D	DuPont	--	C,S	-	-	-
R-676	Parachlor						
R-701	Monastrol Red Y-RT-1590	DuPont	--	--	-	-	-
R-702							
R-703	RT-849-D						
R-704	Quindo Violet RV-6902	Harmon Color	--	--	-	-	-
R-710	Toluidine Toner 20-3050	Amer. Cyanamid	--	S	-	-	-
R-710	Toluidine Toner 10451	Sherwin Williams	--	NC,S	2.5	3	7
R-710	Toluidine Toner DCC-2229						
R-711	Toluidine Toner X 1865	Imperial (Hercules)	--	--	0	-	7.5
R-711	Toluidine Toner Y 790	Western Dry Color	--	--	-	-	-
R-711	Toluidine Toner RT-505-D	DuPont	--	NC,S	-	-	-
R-720							
R-721	Duratone Red RM 5912	Holland Suco	--	NC,S	-	-	-
R-722	Duratone Red RM 5920	Std. Ultramarine	--	NC,S	-	-	-
R-724							
R-726							
R-728	RT-612-D Rhodamine						
R-730							
R-731	Thio Fast Red MV-6617	Harmon Color	--	--	-	-	-
R-734	Tanger Red Toner X761	Imperial (Hercules)	--	--	-	-	-
R-734	Blazing Red Toner A6460	H. Kohnstamm	--	--	-	-	-
R-734	Fire Red Toner	Harshaw	--	NC,S	-	-	-
R-734	Permton Red Toner L120-7018						

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W-100 - W-999

WHITE HIDING PIGMENTS

W No.	Material	Supplier	Micron Range	Supplier Informat	Glidden		
					CS	CW	S
W-100	White Lead Pigment	Baltimore Pig.	--	--	4.5	4	-
W-101	Lead White 60H	Sherwin Williams	--	--	4	-	6
W-102	White Lead W-70 P	Glidden Pigments					
W-103	White Lead 20-10	Baltimore Pig.	--	--	-	-	-
W-104							
W-105	Ti-Cal P-10	DuPont	--	--	-	-	-
W-106	Titanox BC	Titanium Pig.	--	--	7	-	7.5
W-107	Rutile RCHTX	Titanium Pig.	.1-5	--	-	-	-
W-108	Ti-Cal RCHT	Titanium Pig.	--	--	6.5	-	7.5
W-109	Titanox C 50	Titanium Pig.	--	--	-	-	-
W-410	White Lead A	Eagle Picher	.03-8	NC	0	-	5
W-411	White Lead HTS	Nat. Lead	--	--	-	-	-
W-412	White Lead A	Hammond Lead	--	C,S	-	-	-
W-420	45X Lead Silicate	National Lead	--	--	-	-	-
W-423	45X Lead Silicate	National Lead	--	--	-	-	-
W-430							
W-431	White Lead Sublimed	Eagle Picher	.06-16	NC	-	-	-
W-440	P-7 White CIP	Hammond Lead					
W-452	Chemmet #101 ZnO	Am. Chemet	--	C	-	-	-
W-452	Ozark 12-88 ZnO	Sherwin Williams	--	--	4.5	-	-
W-452	Chemmet 101 D.G. Spec.	Am. Chemet	--	--	6.5	-	-
W-454	18M Ozlo	Sherwin Williams	--	--	5+	-	-
W-454	#118 Leaded ZnO	Amer. Chemet	--	2.5-3.5	5	-	-
W-456	35% Leaded Zinc Oxide	Eagle Picher	.06-16	NC	-	-	-
W-512	Kadox 25						
W-514	Zinc Oxide #515	N.J. Zinc	--	5-7	6	6	7+
W-514	#500 ZnO	Eagle Picher	.06-16	C	5	-	7
W-514	AZO ZZZ 77	Am. Zinc	--	--	-	-	-
W-518	#8 Zinc Oxide	N.J. Zinc	--	5-7	-	-	-

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