

TRADE SALES SURVEY
September 25, 1941

In this portion of the survey we have covered three Trade Sales products; 1. Flat Wall paints, 2. Exterior House paints, and 3. Exterior primers or undercoaters. We have confined our attention to the comparative performance of the principal competitive materials with our own institutional products. Under section 1, we will discuss the principal trade sales flats both whites and representative tints as well as some painter and metropolitan materials. In section 2 of this report we will discuss exterior house paints, and section 3 will be devoted to exterior house paint primers.

Examination of Paints

The competitive paints that were tested were purchased on the open market in Chicago. The institutional samples were obtained from regular stocked material of late manufacture or from the various plants or warehouses. When samples were received, all labels were removed and a code number was assigned so that the tester would have no knowledge of the material on test.

Section 1. Flat Wall Paints

General Physical Characteristics

Each paint was subjected to a number of tests as recorded in the various charts of this report. Such things as package condition, degree of settling and ease of stirring were determined but due to the difference or uncertainties of manufacturing dates, these properties were not considered in our evaluations. Such tests as odor in the package, consistency, grind and weight per gallon were also determined.

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Working Properties

The working properties of the paints were determined as follows. All flat wall paints were applied on 4' x 4' Upson Board which had previously been given a black stripe and then coated with SW Wall Primer and Sealer over half of the surface and a coat of glue size applied on the balance. This technique was followed as a difference in performance is often noted when flat wall paints are applied on glue sized surfaces.

The flat wall paints were applied over half of the panel in the white, and then tinted to a dark gray and applied to the balance of the surface. Brushing properties, flow, and uniformity were then rated. After 24 hours the films were checked for drying qualities, sheen, leveling, and uniformity of tint.

Tightness of Film

The tightness of film was determined by applying a coat of SW Semi Lustre Green over a section of each panel. This section was immediately inspected for any tendency of the Semi Lustre to soften the flat wall paint film. The tightness of film was also noted by the degree of sheen that remained on the Semi Lustre film after drying over night.

Washability

The scrub tests were conducted with Lava soap and water in the removal of various stains which also give an indication of the tightness of film.

These tests were conducted after the films had dried for

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one week in the case of the flat Whites but two weeks elapsed before the Creams or Ivory flats were tested. The tests were run on small sections approximating 2 inch squares which were coated with water soluble red ink, lead pencil (5B hardness), and gear grease. These stains were allowed to remain on the surface of the flat wall paint film for 24 hours. The washability was then determined by scrubbing each spot or stain until it was removed, keeping a record of the number of rubs required. In cases where the stain appeared permanent the scrubbing was discontinued at the end of 100 rubs. The condition of the scrubbed surface was noted, and a record was made of the amount of stain remaining and of the amount of paint removed.

"Ghosting"

Tests for "ghosting" were determined on the various flat Whites after they had been shaded to a deep slate with Lamp Black in oil. The regular tinted flat wall paints were applied as received.

In the determination of wet edge, a section of each panel was painted and allowed to stand for 6 minutes. Then painting was resumed special note was made as to the amount of lap on the upper section.

Hiding Power

For the determination of hiding power, all paints were applied on contrast sheets at a given spreading rate. In the case of the flat wall paints, the Whites were spread at 615 sq.ft./gal. and the Creams at 505 sq. ft./gal. All hiding charts were rated in numerical order from best to poorest.

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Color and Brightness

Color or brightness measurements were made on draw downs of .003 inch films on glass as these films produced complete hiding and could be rated more accurately than the normal brushouts on Upson board. Rating is given in two classes such as Blue Whites or Yellow Whites and rated in descending numerical order.

Flexibility

Flexibility tests were made according to Federal Specification TTP-51 A, Section F 21, which describes the procedure for the testing of flat wall paints. The paints were brushed on bright tin panels, dried for 18 hours and then baked for 5 hours at 105° to 110° C. They were then cooled for 15 minutes and bent over a 1/2 inch rod. The bend was then examined for cracks using a magnification of (8X).

Fineness of Grind

All grinds were determined on the SF Fineness Gauge. The lowest reading on this gauge is 1P and in many cases the grinds were so poor that they could not be determined with this gauge. In such cases, the reading is reported as zero fineness.

Discussion of Results

In general all samples had good package condition except Devco's No. 8002 Flat Wall Paint White and Benjamin Moore's Sani-Flat White and Cream, which were rated fair. Lucas' Durafilm Flat Cream was the only sample that had poor package condition. It had firm settling and was very difficult to stir into a uniform consistency.

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Pittsburgh Plate Glass' Wallhide Light Buff, Acme's Master Painters Flat Wall White, Lowe Brothers' Flowing Flat #28613 and Devco's No. 8002 Flat White were also difficult to stir to a uniform consistency.

In charts No. 1 and 2 we have listed the general comments on package condition, degree of settling, ease of stirring, odor in the package, wt/gal. and viscosity for all the flat Whites and Creams that were tested in this series.

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Chart No. 1

<u>Material Tested</u>	<u>Pkgs Condition</u>	<u>Settling</u>	<u>Stirring</u>	<u>Odor in Package</u>	<u>Grind</u>	<u>Lt/ga.</u>
Acme - No-Lustre Finish White	Good	Soft +	Easy	Sharp	0	13.12
Lowe Bros. - Mellotone Flat White 622	Ex.	V. Slight	"	Sweet	1P	15.06
SH - Flattone White (Alternate A)	G	Absent	"	Normal	2M	13.49
Lowe Bros. - H.B. Flat White	Ex.	Slight	"	Thinner	1P	13.09
Acme - M.P. Flat Wall Finish	Good	Firm-	Hard	Sweet	0	13.09
SH - Paintercraft #7	Ex.	Slight	Easy	Normal	1P	12.20
SH - Paintercraft #11	Ex.	V. Slight	"	"	2P	11.91
Lowe Bros. - Flowing Flat Wall 28613	Ex.	V. Slight	Hard	Sweet	2M	12.65
SH - One Coat Flat #10	Ex.	None	Easy	Thinner	2M	13.80
Lucas - Durafilm Flat White	Good	Soft to firm	"	Pungent	0	13.03
M. S. - Neu-tone Flat White	Ex.	V. Slight	"	Normal	0	13.27
SH - Flattone White (Regular)	Ex.	Soft	"	Thinner	1P	12.08
Acme - H.B. Flat White	Ex.	V. Slight	"	Thinner	2M	16.10
DuPont - Flat White	Ex.	V. Slight	"	Normal	1P	11.81
Moore - Sani-flat White	Fair	Firm	"	"	0	14.94
Devco - 8002 Flat White	Fair	Firm	Difficult	Thinner	0	14.93
Sears - One Coat Flat 2313	Good	Firm-	Easy	Musty	0	14.14
DuPont - Town & Country Flat White	Good	Slight	"	Normal	1P	11.79
Wards - Super One Coat Flat White	Ex.	V. Slight	"	"	0	13.79
Devco - Velour Flat White	Ex.	V. Slight	"	"	1P	13.22
Pittsburgh - Wallhide Flat White 26-5	Ex.	V. Slight	"	Perfummy	1P	12.62

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Chart No. 2

<u>Material Tested</u>	<u>Pkge Condition</u>	<u>Settling</u>	<u>Stirring</u>	<u>Odor in Package</u>	<u>Grind</u>	<u>Wt/gal.</u>	<u>Viscosity orifice -</u>
DuPont - Flat Cream	Ex.	V.Slight	Easy	Normal	0	11.79	9.4 sec.-
Pittsburgh - Wallhide Flat Buff	Good	Firm-	Difficult	Sweet	2M	12.64	21.1 "
Wards - Super One Coat Flat Cream	Ex.	None	Easy	Normal	2M	13.11	25.9 "
Acme - No Lustre Flat Ivory	Ex.	Slight	Easy	Thinner	1P	13.10	21.0 " -
Lowe Bros. - Mellotone Flat Cream	Ex.	None	Easy	Sweet	2M	14.90	7.2 "
Lucas - Durafilm Flat Cream	Poor	Firm	V. Diff.	Normal	0	12.88	18.3 "
M. S. - Neutone Flat Cream	Ex.	V.Slight	Easy	Normal	1P	13.35	38.2 " Su
Moore - Sani-flat Cream	Fair	Firm	Diff.	Sl.Pungent	2M	15.11	32.2 "
Devos - Velour Cream 856 N	Ex.	V.Slight	Easy	Normal	1P	13.16	20. " - S
Sears - One Coat Flat 2321 Cream	Ex.	Slight	Easy	Pungent	0	13.18	17.7 "
SW - Flattone Cream 15187	Ex.	V.Slight	Easy	Normal	2M	12.27	19.0 "

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In charts No. 3 and No. 4 we have listed the comparative results of the various flats for brushing, hiding, wet edge, drying, angular sheen and uniformity of sheen. The majority of the flats tested were good in brushing properties, although there were several that were rated fair, and four that were rated poor. DuPont's Flat Wall Paint Cream, Wallhide 26-5 White, Acme's H.B. Flat Wall Finish, and Martin-Senour's Neutone 675 White, were considered too high in body or too sticky under the brush. The hiding properties were rated from best to poorest in numerical order as shown on charts No. 3 and No. 4.

All flats were O.K. for wet edge with the exception of Wallhide 26-5, Flat White, H.B. Flat Wall Finish (Acme), Neutone Flat White, Town & Country Flowing Flat, and Sears Roebuck's One Coat #2313.

Drying properties were good on all flats with the exception of Wallhide 26-5 Flat White, Acme's No Lustre White, and Acme's Master Painters Flat Wall Finish.

The uniformity of sheen was rather poor on a number of the flats so they will not be listed here but can be checked by referring to charts, No. 3 and 4. Sheen was checked by viewing the panel at a low angle of incidence, observing general uniformity of sheen on regular brush-out, and watching for any difference of sheen on a six minute lap.

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Chart No. 3

Material Tested	Brushing	Hid- ing	Wet Edge @ 6 min.	Flow	Drying		Color	Angular Sheen
					Set to, Overnite	Hardness		
Acme-No-Lustre Fin. White	Good-	5th	o.k.	Fair	41 min.	Sl.Soft	6th Yel. Wh.	Medium
Lowe Bros.-Mellotone Flat	Sl. too							
White 622	much pull	6th	o.k.	Fair	66 "	Hard	7th Bl. Wh.	High
SW-Flattone White (Alter- nate A)	Good	8th	o.k.	Good	25 "	Hard	11th Bl. Wh.	Med.Hig
Lowe Bros.-H.B.Flat White	Heavy	21st	o.k.	Good	146 "	Hard	3rd Bl. Wh.	High
Acme-M.P. Flat Wall Fin.	Good	4th	o.k.	Fair	40 "	Sl.Soft	7th Yel. Wh.	Med.Hig
SW-Paintercraft #7	Good	10th	o.k.	Good	29 "	Hard	10th Bl. Wh.	" "
SW-Paintercraft #11	Good	11th	V.Sl.Short	"	22 "	Hard	2nd Yel. Wh.	High
Lowe Bros.-Flowing Flat								
Wall 28613	Good	17th	o.k.	Sl.too much	67 "	Hard	1st Bl. Wh.	Medium
SW-One Coat Flat #10	Good	15th	o.k.	Good	28 "	Hard	1st Yel.Wh.	High
Lucas - Durafilm Flat Wh.	Sticky	1st	o.k.	Good	48 "	Hard	8th Yel.Wh.	Med.Hig
SW-Flattone White (Reg- ular)	Good	9th	o.k.	Good	21 "	Hard	8th Bl. Wh.	Medium
M.S.-Neutone Flat White	Poor	7th	Short	Good	23 "	Hard	4th Yel. Wh.	Low to
Acme-H.B. Flat White	Poor	19th	Short	Fair-	43 "	Medium	5th Bl. Wh.	Medium
DuPont-Flat White	Good	14th	Sl.Short	Good	39 "	Hard	5th Yel. Wh.	Med. Hi
Moore-Saniflat White	Good-	20th	" "	Good-	20 "	Hard	6th Bl. Wh.	" "
Devco-8002 Flat White	Good	12th	o.k.	Fair	79 "	Hard	4th Bl. Wh.	High
Sears-One Coat Flat 2313	Sl.Sticky	2nd	Short	Fair-	23 "	Hard	9th Yel. Wh.	High
DuPont-Town & Country								
Flat White	Sl. too free	16th	Short	Good-	36 "	Hard	3rd Yel. Wh.	Medium
Wards- Super One Coat								
Flat White	Good	3rd	Sl.Short	" -	33 "	Hard	9th Bl. Wh.	Med.Hig
Devco-Velour Flat White	Good	18th	Sl.Short	Good	38 "	Hard	2nd Bl. Wh.	" "
Pittsburgh-Allhide Flat								
White 26-5	Poor (Sticky)	13th	Short	Fair	28 "	Soft	10th Yel. Wh.	Medium

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Chart No. 4

<u>Material Tested</u>	<u>Brushing</u>	<u>Hid- ing</u>	<u>Wet Edge @ 6 min.</u>	<u>Flow</u>	<u>Drying</u>		<u>Color</u>	<u>Angular Sheen</u>
					<u>Set to Touch</u>	<u>Overnite Hardness</u>		
DuPont-Flat Wall Cream Too Easy		5th	o.k.	Good	38 min.	V. Good	--	Medium
Pittsburgh-Wallhide Flat Buff	Good	7th	o.k.	Fair	20 "	Good	--	"
Wards-Super One Coat Cr.	"	1st	o.k.	Good-	47 "	V. Good	--	Medium H
Acme-No-Lustre Ivory	V.Good	9th	o.k.	Fair	34 "	Good	--	Medium
Lowe Bros.-Mellotone Flat Cream	V.Good	8th	o.k.	Good	65 "	"	--	Med.to H
Lucas-Durafilm Flat Cr.	Fair +	6th	Sl.Short	"	36 "	V. Good	--	Medium
M.S.-Neutone Flat Cream	Sl. Sticky	3rd	" "	"	25 "	Good	--	Low to M
Moore-Saniflat Cream	Good	10th	Sl.Short	Fair-	15 "	"	--	Medium
Devco-Velour Cream	Fair	11th	o.k.	Good	42 "	"	--	"
Sears-One Coat Flat Cr.	Good	4th	o.k.	Fair	128 "	Ex.	--	"
SN-Flattone Cream 15187	Good	2nd	o.k.	V.Good	21 "	Good	--	"

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In the following charts 5 and 6, we have recorded the results on washability under the heading of scrub tests. The sealing properties of the various flats, were determined by coating them with an enamel such as Semi-Lustre Green, and measuring the degree of sheen that remained on the film after the Semi-Lustre was dry. Our rating on non-uniformity of tint is also reported in Charts 5 and 6.

When the various flats were tested for washability by the removal of stains such as red ink, lead pencil and grease, it became rather difficult to make a direct evaluation. In many cases the paint would be removed before the stain and in other cases where the film was more resistant to water, a large number of rubs would be required. However, in both cases the films may be equally porous. However, this feature was checked by our tests on enamel hold out which were parallel to our tests on washability.

The tests on sealing properties or tightness of film showed considerable variation among the various flats. Some were very good in this respect and others were rated poor. This was also true in respect to uniformity of tint when the flats were shaded to a deep slate color. The purchased tinted flats such as Creams and Ivories did not show any ghosting and in general were definitely better in sealing properties or tightness of film than the whites.

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	<u>Scrub Tests (Strokes)</u>				<u>Paints coated with Semi-Lustre</u>		<u>Uncoating or Tinted Gr</u>	
	<u>Red Ink</u>	<u>Pen-oil</u>	<u>Grease</u>		<u>Immediate Softening</u>	<u>Sheen</u>	<u>Amt.</u>	<u>Un</u>
Acme-No-Lustre White	40	10	40	Stain Remains	Def.	Poor	Slight	Fa
				Paint Removed				
Lowe Bros.-Hollotone Wh.	100	9	100	" "	Slight	Fair	V.Slight	G
SW-Flattone(Present Alternate A)	20	7	80	Paint Removed at 80 strokes	None	Good	" "	Go
Lowe Bros.-E.B. Flat White	40	12	70	Pt. Removed-70 strokes	Slight	Good	V.Slight	G
Acme-M.P. Flat White	19	5	31	Pt. remvd. Grease stain remaining-31 strokes	Bad	Poor	Definite	F
SW-Paintercraft #7	40	9	100	Pt. & Grease partly remvd-100 strokes	Slight	Good	None	V
SW-Paintercraft #11	30	6	34	Grease stain remains Paint remvd.-34 strokes	Def.	Fair +	Def.	D
Lowe Bros.Flowing Flat Wall	47	10	100	Pt. partly remvd.100 "	None	V.Good	Slight	G
SW-Paintercraft #10	70	11	50	Pt. remvd. stain remains-50 strokes	Slight	Good	Absent	V
Lucas-Durafilm Flat Wh.	50	5	50	" " "	Slight	Poor-fair	"	G
SW-Flattone (Regular)	50	10	100	Pt. remvd. stain remains-100 strokes	None	Good	Definite	D
M.S.-Neutone Flat White	40	4	80	Pt. remvd. stain remains-80 strokes	Def.	Fair-	Absent	G
Acme-H.B. Flat White	60	4	70	Pt. remvd. stain remains-80 strokes	Slight	Fair	Bad	P
DuPont-Flat Wall White	30	6	30	Pt. remvd. stain remains-30 strokes	V.Slight	Poor	V.Slight	G
Moore-Saniflat White	17	6	40	Pt. partly remvd.-40 str."	" "	Fair +	Slight	F
Devco-8002 Flat White	5	10	100	Pt. remvd. stain remains-100 strokes	Bad	Poor	Absent	G
Sears-One Coat Flat Wh.	22	8	55	Pt. remvd. stain remains-50 strokes	V.Slight	V.Poor	Sl. to Def.	
DuPont-Town & Country Flat White	40	5	25	Pt. remvd. stain remains-25 strokes	Slight	Fair-	Slight	F
Wards-Super One Coat Flat	100	10	100	Pt. partly remvd-100 str.	None	Fair	Absent	G
Devco-Volour Flat White	100	9	100	Part of stain remaining-100 strokes	V.Slight	Poor-Fair	V. Slight	G
Pittsburgh-Flat White Wallhide 26-5	100	14	80	Pt. remvd. stain remaining-100 strokes	Def.	Fair	Slight	S

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Chart No. 6

<u>Material</u>	<u>Scrub Tests (Strokes)</u>			<u>Sealing Proper-</u> <u>ties coated with</u> <u>Semi-Lustre</u>	<u>Ghost</u>		
	<u>Red Pen-</u> <u>Ink</u>	<u>oil</u>	<u>Grease</u>	<u>Immediate</u>	<u>Sheen</u> <u>When dry</u>	<u>Amt.</u>	
DuPont-Flat Wall Cream	100	5	95	Paint Removed @ 95 strokes	None	Poor to Fair	Absen
Pittsburgh-Wallhide Flat Buff	100	5	100	Paint partly re- moved @ 100 str.	None	Very Good	Absen
ards-Super One Coat Flat Cr.	50	7	60	Paint removed @ 60 strokes.	None	Poor	Absen
Acme-No Lustre Ivory	26	8	37	Paint removed @ 37 strokes	Slight	Fair	Absen
Lowe Bros.-Mellotone Flat Cr.	100	5	100	Paint remvd-stain V. remains-100 str.	Slight	Fair	Absen
Lucas-Durafilm Flat Cr.	100	9	59	Paint remvd-stain remains-59 str.	None	Good	Absen
M.S.-Neutone Flat Cr.	5	11	100	Partial Paint re- moved-100 str.	None	Good	Absen
Moore-Saniflat Cream	5	5	100	Slight Paint re- moved-100 str.	None	Very Good	Absen
Devco-Velour Cream	12	7	100	@ 100 strokes no Paint removal	None	Very Good	Absen
Sears-One Coat Flat Cr.	14	14	100	Partial Paint re- moved-100 str.	None	Good	Absen
S.E.-Flattone Cream	5	5	100	Partial Paint re- moved-100 str.	None	Very Good	Absen

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Chart No. 7

General Rating
Flat Wall Paint Whites

Material	Brushing 10	Hiding 10	Wet Edge 10	Flow 10	Drying 10	Color 10	Uniformity of Sheen 10	Resability 10	Sealing Properties 10
Acme-No Lustre Finish White	8	9	10	7	6	8	8	6	6
Lowe Bros.-Mellotone White 622	8	9	10	7	10	8	7	7	7
SW-Flattone White (Alternate A)	9	8	10	8 $\frac{1}{2}$	10	8	8	10	9
Lowe Bros.-H.B. Flat Wall White	8	6	10	9	10	9 $\frac{1}{2}$	8	10	9
Acme-Master Painters Flat White	9	9	10	7	6	7	7	7	6
SW-Paintercraft #47	9	8	10	8 $\frac{1}{2}$	10	7	10	9	9
SW-Paintercraft #11	9	8	9	9	10	7	8	7	7 $\frac{1}{2}$
Lowe Bros. Flowing Flat Wall Wh.	8 $\frac{1}{2}$	7	10	10	10	10	6	10	10
SW-One Coat Flat No. 1C	9	7	10	9	10	7	10	7	9
Lucas-Durafilm Flat White	7 $\frac{1}{2}$	10	10	9	10	7	7	7	6 $\frac{1}{2}$
SW-Flattone White (Regular)	9	8	10	8 $\frac{1}{2}$	10	8 $\frac{1}{2}$	7	8	8 $\frac{1}{2}$
H.S.-Neutone Flat White	6 $\frac{1}{2}$	9	8	9	10	7	6	7	7
Acme-H.B. Flat White 45L 11	7	6	8	7	9	8 $\frac{1}{2}$	6	7	7
DuPont-Flat Wall White	9	7	9	9	10	7	8	6	6
Moore-Saniflat Pure White	9	6	8	9	10	8 $\frac{1}{2}$	8	10	8
Devco-No.8002 Flat White	9	7	10	7	10	9	8 $\frac{1}{2}$	9	7
Sears-One Coat Flat 2313	8	10	8	7	10	7	7	7	6
DuPont-Town & Country Flat White	9	7	8	9	8	8	8	7	6 $\frac{1}{2}$
Wards-Super One Coat White 75-1506	9	10	9	8	10	8	7	7	7
Devco-Velour Finish 456 N	9	6	9	9	10	10	8	7	7
Pittsburgh-Allhide Flat Wall 26-5	6	7	7	6 $\frac{1}{2}$	7	7	6 $\frac{1}{2}$	6	7

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Chart No. 8

General Rating
Flat Wall Paint Tints

	Brushing 10	Hiding 10	Met Edge 10	Flow 10	Drying 10	Color 10	Uniformity of Sheen 10	Washability 10	Sealing Properties 10	Uniformity of Tint 10	Total 100
DuPont-Flat Wall Cream 375	8	9	10	9	10	Tints	7	7	6 $\frac{1}{2}$	9	7
Pittsburgh-Allhide Flat Buff	9	8 $\frac{1}{2}$	10	7	10		7	6	10	9	7
Wards-Super One Coat Cream	9	10	10	8 $\frac{1}{2}$	10		8	8	6	9	7
Acme-No-Lustre Ivory	9 $\frac{1}{2}$	8 $\frac{1}{2}$	10	7	10		7	6	7	9	7
Lowe Bros.-Mellotone Cream	9 $\frac{1}{2}$	8 $\frac{1}{2}$	10	8	10		7	7	7	9	7
Lucas-Durafilm Cream	8 $\frac{1}{2}$	9	8	9	10		8	7	9	9	7
M.S.-Neutone Flat Cream	8	9	8	9	10		6	9	9	9	7
Moore-Scniflat Cream	9	7	8	6 $\frac{1}{2}$	10		6	9	10	9	7
Devco-Velour Cream	7	7	10	9	10		7	9	10	9	7
Sears-One Coat Flat Cream	9	9	10	6 $\frac{1}{2}$	10		7	9	9	9	7
SI-Flattone Cream	9	9	10	10	10		9	10	10	9	7

(Color not rated because of variations in tint in different lines. Therefore, numerical totals are adjusted on basis of 100.)

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Flat Wall Paints - White

Acme-No-Lustre Finish White
Package Code- 4Y 12P 16310

Pigment	63%	
Titanium Calcium Pigment	33%	
Lithopone	46%	
Asbestine	19%	
		<u>100%</u>

Vehicle	37%	
(1) Flatting Oil	52%	
Mineral Spirits	34%	
Japan Drier	14%	
		<u>100%</u>

(1) Linseed Oil 50%
Mineral Spirits 50%

SWP-Flattone White (Alternate A)
Package Code- 15185 C 2551

Pigment	59%	
Lithopone	50.0%	
Zinc Sulphide	37.5%	
Whiting	12.5%	
		<u>100.0%</u>

Vehicle	41%	
Vegetable Oils	22%	
Resins	5%	
Driers & Thinner	73%	
		<u>100%</u>

Acme W. L. and C. Works
Master Painter's Flat White
Package Code- 49 L 13 1491 D

No analysis given

Lowe Bros.-Mellotone Flat White 622
Package Code- B 2121 622

Pigment	68%	
Lithopone	79.5%	
Titanium Calcium Pigment	11.5%	
Silicates	9.0%	
		<u>100.0%</u>

Vehicle	32%	
Vegetable Drying Oils	34.5%	
Drier & Thinner	65.5%	
		<u>100.0%</u>

Lowe Brothers
H. B. Flat White
Package Code- B 1361 25842

Lithopone	37.5%
Titanium Calcium	15.9%
Magnesium Silicate	6.6%
Drying Oils	14.7%
Driers & Thinners	26.3%
	<u>100.0%</u>

Sherwin-Williams
Paintercraft Flat Wall Paint White no. 7
Package Code 26607 C 2051

Pigment	53%	
Titanium Calcium	71%	
Titanium Dioxide	12%	
Calcium Carbonate	17%	
		<u>100%</u>

Vehicle	47%	
Resin	5%	
Vegetable Oils	19%	
Driers & Thinners	76%	
		<u>100%</u>

0007-SWP-044588

Acme W. L. & C. Works
H. B. Flat White
Package Code- 49 L 11 49 1 D

No analysis Given

Benjamin Moore & Co.
Sani-Flat White
Package Code- SFW 5717

Pigment	67.0%	
Lithopone		83.4%
Magnesium Silicate		16.6%
		<u>100.0%</u>
Vehicle	33.0%	
Treated Drying Oils		37.4%
Mineral Spirits		62.6%
		<u>100.0%</u>

Sears Roebuck & Co.
One Coat Flat Paint 2313
Package Code- 2313 D 18 1A

Pigment	60.0%	
Titanium Dioxide		24.1%
Lithopone		13.0%
Magnesium Silicate		6.6%
Calcium Sulphate		56.3%
		<u>100.0%</u>
Vehicle	40.0%	
Resin		8.5%
Processed Vegetable Oil		24.5%
Drier		1.9%
Mineral Spirits		63.2%
Water		1.9%
		<u>100.0%</u>

DuPont de Nemours E I & Co. Inc.
Flat White
Package Code- C 493027 375 750

Pigment	55%	
Titanium Calcium Pigment		85%
Calcium Carbonate		11%
Silicates		4%
		<u>100%</u>
Vehicle	45%	
Resin		4%
Drier		10%
Vegetable Oils		26%
Mineral Spirits		60%
		<u>100%</u>

Devco & Raynolds
No. 8002 Flat White
Package Code- 3 L5 T 8003

Lithopone	29.5%
Titanium Calcium	21.1%
Calcium Carbonate	4.3%
Magnesium Silicate	12.7%
Resins	1.7%
Processed Oils	11.5%
Mineral Thinner & Drier	19.2%
	<u>100.0%</u>

DuPont de Nemours E I & Co. Inc.
Town & Country Flat White
Package Code- C 51939 377 754

Pigment	54%	
Titanium Calcium Pigment		85%
Calcium Carbonate		11%
Silicates		4%
		<u>100%</u>
Vehicle	36%	
Resin		3%
Drier		10%
Vegetable Oils		25%
Mineral Spirits		62%
		<u>100%</u>

0007-SWP-044589

Montgomery Ward & Co.
Super One Coat Flat White
Package Code- 1991 S 200

Pigment	63.0%
Titanium Dioxide	24.1%
Zinc Sulphide Barium Pigment	21.9%
Asbestine	17.0%
Linseed Oil	3.2%
*Varnish	17.6%
Drier and Mineral Spirits	16.2%
	<u>100.0%</u>
Vehicle	37.0%
*Fixed Fatty Oils	34.0%
Resins	18.0%
Mineral Spirits	48.0%
	<u>100.0%</u>

Pittsburgh Plate Glass Co.
Wallhide Flat White 26-5
Package Code- 26-5 D-6508

Titanium White	40.6%
Silica & Silicates	20.0%
Vegetable Oils	12.7%
Resins	.7%
Mineral Spirits & Driers	26.0%
	<u>100.0%</u>

Flat Wall Paints - Cream

DuPont de Nemours E I & Co. Inc.
Flat Cream
Package Code- C 502062 375 763

Pigment	54%
Titanium Calcium Pigment	80%
Calcium Carbonate	11%
Silicates	4%
(Orange Oxide)	
(Chrome Yellow)	5%
	<u>100%</u>

Vehicle	46%
Resins	3%
Drier	10%
Vegetable Oils	25%
Mineral Spirits	62%
	<u>100%</u>

Devco & Reynolds
Veloopr Flat White
Package Code- E 8 U 459 74747

Pigment	62.8%
Calcium Titanox	79.6%
Calcium Carbonate	20.4%
	<u>100.0%</u>
Vehicle	37.2%
Resins	4.65%
Processed Vegetable Oils	33.45%
Mineral Thinners	53.60%
Turpentine	7.50%
Driers	1.80%
	<u>100.00%</u>

Pittsburgh Plate Glass Co.
Wallhide Flat Buff
Package Code- 26-12 C-65661

Titanium White	40.6%
Silica & Silicates	20.0%
Vegetable Oils	12.7%
Resins	.7%
Mineral Spirits & Driers	26.0%
	<u>100.0%</u>

Tinted with Pure Tinting Colors

0007-SWP-044590

0007-SWP-000113960

Montgomery Ward & Co.
Super One Coat Flat Cream
Package Code 1021 S 211

Pigment	62.2%	
Titanium Calcium Pigment		39.8%
Titanium Magnesium Pigment		19.1%
Titanium Dioxide		3.3%
Linseed Oil		3.3%
*Varnish		17.8%
Drier & Mineral Spirits		16.7%
		<u>100.0%</u>

Vehicle	37.8%	
*Fixed Fatty Oils		42.0%
Resins		13.0%
Mineral Spirits		45.0%
		<u>100.0%</u>

Tinted with pure color,
viz: Iron Oxide

Lowe Brothers
Mellotone Flat Cream
Package Code- B 2131 628

Pigment	68.0%	
Lithopone		78.0%
Titanium Calcium Pigment		11.0%
Silicates		9.0%
C. P. Chrome Yellow		1.3%
Ochre		.7%
		<u>100.0%</u>

Vehicle	32.0%	
Vegetable Drying Oils		34.5%
Drier & Thinner		65.5%
		<u>100.0%</u>

Acme W. L. & C. Works
No-Lustre Finish
Package Code- 4 Y 17P 1601 D

Pigment	60%	
Zinc Sulphide Pigment		
(Barium)		80.0%
Magnesium Silicate		20.0%
		<u>100.0%</u>

Vehicle	40%	
(1) Flatting Oil		
(Linseed Base)		55.0%
Japan Drier		15.0%
Mineral Spirits		30.0%
		<u>100.0%</u>

(1) Vegetable Oils 50%
Mineral Spirits 50%

Tinted with Pure Color, viz: Chrome
Yellow

John Lucas & Company, Inc.
Durafilm Flat Cream
Package Code- T 16 F 1671

Titanium Pigment	50%
Silica & Silicates	4%
Calcium Carbonate	6%
Tinting Pigment	1%
Treated Oil	7%
Varnish	12%
Volatile Thinner	20%
	<u>100%</u>

0007-SWP-044591

0007-SWP-000113961

Martin-Senour
NewTone Flat Cream
Package Code- 696 M 1821

Pigment	60.5%	
Lithopone		43.5%
Titanium Pigment		37.5%
Silicates & Carbonates		19.0%
		<u>100.0%</u>

Vehicle	39.5%	
Vegetable Drying Oils		23.0%
Mineral Spirits		64.0%
Japan Drier		13.0%
		<u>100.0%</u>

Tinted with Pure Colors In Oil

Devco & Raynolds
Velour Cream 856 N
Package Code- E19U 856 76842

No analysis given

SW-Flattone Cream 15187
Package Code- 15187 C 2091

Pigment	53%	
Titanium Dioxide		13%
Calcium Carbonate		21%
Titanium Calcium		66%
		<u>100%</u>

Vehicle	47%	
Vegetable Oil		24%
Resins		5%
Mineral Spirits & Drier		71%
		<u>100%</u>

Benjamin Moore & Co.
Sani-Flat Cream
Package Code- SF 1 5620

Pigment	67.8%	
Lithopone		73.0%
Magnesium Silicate		24.3%
Ochre		2.1%
Chrome Yellow		..6%
		<u>100.0%</u>

Vehicle	32.2%	
Treated Drying Oils		37.8%
Mineral Spirits		62.2%
		<u>100.0%</u>

Sears, Roebuck & Co.
One Coat Flat Cream 2321
Package Code- 2321 A30 1A

Pigment	60.0%	
Lithopone		61.0%
Zinc Sulphide		10.0%
Barium Sulphate		10.0%
Magnesium Silicate		19.0%
		<u>100.0%</u>

Vehicle	40.0%	
Linseed Oil		24.4%
Resins		8.5%
Japan Drier		2.4%
Mineral Spirits		64.7%
		<u>100.0%</u>

Tinted with Chrome Yellow, Red Oxide
and Lamp Black

0007-SWP-044592

0007-SWP-000113962

Section II. House Paints - Whites & CreamsProcedure of Testing

The various properties such as package condition, degree of settling, ease of stirring, odor, consistency, grind, weight per gallon and viscosity were determined in the same manner as in the case of the flat wall paints.

The brushing tests were run on beveled siding panels that had been previously primed with Rx 450 Undercoater. The primer was permitted to dry for three days before the panels were used on these tests. After application of the various house paints, the panels were immediately inspected for flow and sagging tendencies.

All hiding determinations were made on contrast sheets. The White house paints were spread at 455 sq. ft./gal. and the Creams at 700 sq. ft./gal. Each set of paints were rated from best to poorest in numerical order.

Drying properties such as "set to touch" and "through dry" were determined in the laboratory from draw downs on glass of .003 inch films.

As indicated in chart No. 10 we feel that Pittsburgh Plate Glass Co.'s Titania White 1-54, Lucas' Super Outside White and Ward's Super House Paint Cream #12 were definitely too sticky for satisfactory brushing. DuPont's #40 Outside White was rated poor in flow and Ward's Super House Paint #12 Cream was definitely too high in flow. However, in general most all of the house paints were quite satisfactory in so far as our tests would indicate.

0007-SWP-044593

Chart No. 9

House Paints - Whites & Creams

<u>Material</u>	<u>Pkgs Cond.</u>	<u>Settling</u>	<u>Stirring</u>	<u>Odor</u>	<u>Consist- ency</u>	<u>Grind</u>	<u>Wt/ga</u>
Wards-Super House Paint #11	Ex.	None	Easy	Normal	Normal	O	16.4
Devco-Outside White 547-N	Good	Slight	Diff.	Varnish	Normal	1P	15.3
Master Mix House Paint 143	Good	Slight	Easy	Thinner	Thin	O	16.1
Moorewhite Ex. Paint White	Fair	Firm	V.Diff.	Normal	Normal	1P	17.0
P.P.G.-Titanic O W 1-54	Fair	Def.	Easy	Normal	Full body	O	15.5
New Era O W 1-A-122	Ex.	Trace	Easy	Normal	Full body	O	16.1
Monarch O W	Ex.	None	Easy	Normal	Normal	O	16.1
Lowe Bros.-High Standard Wh.	Ex.	Trace	Easy	Normal	Normal	1P	15.7
Lucas-Super Outside White	Good	V.Slight	Easy	Normal	Normal	2M	15.9
SW-Gloss White	Ex.	Trace	Easy	Normal	Normal	1P	16.4
DuPont-#40 Outside White	Ex.	Trace	Easy	Normal	Puffing	1P	15.6
Wards-Super House Paint #12 Cr.	Ex.	None	Easy	Normal	Enamel Type	O	16.8
Devco-Cream #550	Fair	Soft +	Diff.	Normal	Normal	2M	15.3
Master Mix Cream #154	Ex.	Slight	Easy	Normal	Thin	1P	14.5
Moore-House Paint Cream #29	Good	Slight	Diff.	Thinner	Normal	1P	16.2
P.P.G.-Jersey Cream 1-330	Ex.	Trace	Easy	Thinner	Normal	1P	16.2
Acme-New Era Cream 140	Good	Slight	Easy	Normal	Normal	O	15.4
Monarch-Cream 501	Considerable skins	None	Easy	Normal	Normal	O	15.4
Lowe Bros.-H.S. Cream 305	Ex.	None	Easy	Normal	Normal	1P	15.1
Lucas-Tinted Gloss Cream 279	Fair +	Firm	Diff.	Normal	Normal	1P	15.2
SW-Cream 462	Ex.	None	Easy	Normal	Normal	2M	15.4
DuPont Cream 138	Ex.	Slight	Easy	Normal	Normal	1P	14.4

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0007-SWP-000113964

Chart No.10

House Paints - Whites & Creams

	Brushing	Hiding	Flow	Gloss	Drying Set to T
Wards Super House Paint #11	Good (Sl. Pull)	5th	Good	Good H.P.	5 hr.55
Devco-Outside White 547-N	Good (Sl. Pull)	2nd	Fair (Normal)	Good H.P.	4 hr.50
Master Mix House Paint 143	" " "	4th	" "	" " "	5 " 55
Moorewhite Ex. Paint White	Excellent	11th-Poorest	" "	Low	5 " 46
P.P.G-Titanic O W 1-54	V.Sticky	Best	" "	Good H.P.	4 " 50
Acme-New Era O W 1-A-122	Excellent	9th	" "	" " "	8 " --
Monarch O W	Good	7th	" "	" " "	5 " 45
Low Bros.-High Standard Wh.	Good	3rd	Fair +	Good " "	5 " 5
Lucas-Super Outside White	Sticky	10th	Fair (Normal)	Good " "	8 " --
SW-Gloss White 471	Good	8th	Fair +	" " "	8 " 25
DuPont-#40 Outside White	Good	6th	Poor	" " "	5 " 30
Wards-Super House Paint #12 Cr.	Sticky	5th	Too High	V. High	6 " --
Devco-Cream #550	Good	10th	Fair (Normal)	Med.H.P.Gloss	5 hrs.
Master Mix Cream #154	Too easy	11th-Poorest	Normal	High H.P.	5 hrs. 5
Moore-House Paint Cream #29	Ex.	9th	Fair (Normal)	Med. " "	5 " 5
P.P.G.-Jersey Cream 1-330	Good	7th	" "	" " "	6 " "
Acme-New Era Cream 140	Good	4th	" "	High " "	8 " 1
Monarch Cream 501	Good	Best	Slightly High	" " "	5 " 2
Low Bros.-H.S. Cream 305	Good	2nd	" "	" " "	5 " 3
Lucas-Tinted Gloss Cr. 279	Good	8th	Normal	" " "	7 " 3
SW-Cream 462	Ex.	6th	Fair (Normal)	Med " "	5 " 4
DuPont-Cream 158	Ex.	3rd	" "	" " "	6 " "

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100%

Exterior House Paints - White

Montgomery Ward & Co.
Super House Paint #11
Package Code- F 2271 S 11

Pigment	66.1%	
Basic Carbonate White Lead	15.5%	
*Leaded Zinc Oxide	50.5%	
Titanium Dioxide	16.0%	
Asbestine	18.0%	
	100.0%	
*Basic Sulphate White Lead	17.7%	
Zinc Oxide	32.8%	
	50.5%	
Vehicle	33.9%	
Linseed Oil	85.0%	
Japan Drier	15.0%	
	100.0%	

Sears, Roebuck & Co.
Master-Mixed House Paint 143
Package Code- 143 B E 2 1R

Pigment	65.7%	
*White Lead	39.3%	
Zinc Oxide	25.7%	
**Titanium Magnesium Pigment	28.5%	
Titanium Dioxide	6.5%	
	100.0%	
Vehicle	34.3%	
Refined Linseed Oil	85.0%	
Drier	5.0%	
Mineral Spirits	10.0%	
	100.0%	
*Basic Carbonate White Lead	67.5%	
Basic Sulphate White Lead	32.5%	
	100.0%	
**Titanium Dioxide	30.0%	
Magnesium Silicate	70.0%	
	100.0%	

Pittsburgh Plate Glass Co.
Titanic Outside White 1-54
Package Code- 1 54 D 3755

35% Leaded Zinc Oxide	29.2%	
Basic Lead Carbonate	10.9%	
Titanium Dioxide	4.4%	
Titanium Magnesium	19.3%	
Raw Linseed Oil	22.6%	
Heat Treated Linseed	9.7%	
Mineral Spirits	2.4%	
Driers	1.7%	
	100.0%	

Devco & Raynolds
Outside White Gloss 547 N
Package Code- F 13 U 547 80873

Pigment	63.9%	
Lead Titanate	5.0%	
Titanium Magnesium	32.8%	
Titanium Dioxide	4.2%	
Zinc Oxide	29.0%	
*White Lead	29.0%	
	100.0%	
*Basic Lead Sulphate	53.8%	
Basic Lead Carbonate	46.2%	
	100.0%	
Vehicle	36.1%	
Processed Linseed & Tung Oils	88.0%	
Mineral Thinner & Drier	12.0%	
	100.0%	

Benjamin Moore & Co.
Moorwhite Exterior Paint White
Package Code- P90 5116

Pigment	69.3%	
Basic Lead Carbonate	43.4%	
Titanium Barium Pigment	38.6%	
Magnesium Silicate	20.0%	
	100.0%	
Vehicle	30.7%	
Linseed Oil	73.0%	
Mineral Spirits	15.3%	
Japan Drier	11.7%	
	100.0%	

Acme White Lead & Color Works
New Era Outside White
Package Code- 1A 122 195 1D

Pigment	65%	
(1) White Lead	33%	
Zinc Oxide	30%	
Titanium Magnesium Pigment	32%	
Titanium Dioxide	5%	
	100%	

Vehicle	35%	
Raw Linseed Oil	73%	
Processed Linseed Oil	8%	
Soybean Oil	7%	
Japan Drier	12%	
	100%	
(1) Basic Lead Carbonate	53%	
Basic Lead Sulphate	47%	
	100%	

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Martin-Senour
Monarch Outside White
Package Code- 100 M 2121

Basic Carbonate-White Lead	12.5%
Basic Sulphate-White Lead	12.0%
Zinc Oxide	16.0%
Titanium Dioxide	5.0%
Titanium Magnesium Pigment	19.5%
Linseed Oil	31.5%
Japan Drier	3.5%
	<u>100.0%</u>

Lowe Brothers
High Standard White
Package Code- B 2091 328

Pigment	65.0%
*White Lead	35.0%
Titanium Magnesium	29.0%
Zinc Oxide	30.0%
Titanium Dioxide	6.0%
	<u>100.0%</u>
*Basic Carbonate White Lead	54.5%
Basic Sulfate White Lead	45.5%
	<u>100.0%</u>
Vehicle	35.0%
Linseed Oil	90.0%
Drier & Thinner	10.0%
	<u>100.0%</u>

John Lucas & Co.
Super Outside White
Package Code- 3 FOWS F 1421

Pigment	64%
Basic Carbonate White Lead	35%
Basic Sulphate White Lead	5%
Zinc Oxide	25%
Titanium Dioxide	4%
Titanium Magnesium	31%
	<u>100%</u>
Vehicle	36%
Linseed Oil	91%
Japan Thinner & Drier	9%
	<u>100%</u>

Sherwin-Williams
Gloss White
Package Code- 471 C 2201

Pigment	66%
*S-W Oxlo Lead-Zinc Pigment	43%
White Lead Carbonate	27%
Titanium Magnesium	27%
Titanium Dioxide	3%
	<u>100%</u>
*Basic Sulphate Wht. Lead	15%
Zinc Oxide	28%
	<u>43%</u>
Vehicle	34%
Linseed Oil	90%
Japan Drier	10%
	<u>100%</u>

DuPont de Nemours E I & Co. Inc.
#40 Outside White
Package Code- C 474072 301 756

Pigment	63%
Titanium Magnesium Pigment	32%
*White Lead	33%
Zinc Oxide	30%
Titanium Oxide	5%
	<u>100 %</u>
*Basic Carbonate White Lead	51%
Basic Sulphate white Lead	49%
Vehicle	37%
Linseed Oil	82%
Drier	5%
Mineral Spirits	6%
	<u>100%</u>

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Exterior House Paints - Tints

Montgomery Ward & Co.
Super House Paint #12 Cream
Package Code- 2091 S 12

Pigment 66.7%
Basic Carbonate White Lead 27.3%
*Leaded Zinc Oxide 50.0%
Titanium Dioxide 4.2%
Asbestine 18.5%
100.0%
*Basic Sulphate White Lead 17.5%
Zinc Oxide 32.5%
50.0%

Vehicle 33.3%
Linseed Oil 85.0%
Japan Drier 10.0%
Turpentine 5.0%
100.0%

Sears, Roebuck & Co.
Master Mixed Cream #154
Package Code- 154 A G 26 28

Pigment 60.0%
Basic Sulphate White Lead 37.0%
Zinc Oxide 30.0%
*Titanium Magnesium Pigment 27.0%
Magnesium Silicate 6.0%
100.0%

Vehicle 40.0%
Linseed Oil 86.0%
Drier 4.0%
Mineral Spirits 10.0%
100.0%

*Titanium Dioxide 30.0%
Magnesium Silicate 70.0%
100.0%

Tinted with Ferric Oxide, Chrome Yellow, Acme W. L. & C. Works
& Lamp Black

Pittsburgh Plate Glass Co.
Jersey Cream 1-330
Package Code- 1 330 D 5630

35% Leaded Zinc Oxide 32.4%
Lead Titrate 16.6%
Magnesium Silicate 15.7%
Raw Linseed Oil 24.1%
Heat Treated Linseed Oil 7.8%
Mineral Spirits 2.3%
Driers 1.1%
100.0%

Devco & Reynolds
Cream #550
Package Code- H 12 T 550 55599

Pigment 63.2%
Lead Titanate 19.4%
Zinc Oxide 24.3%
Basic Lead Carbonate 14.6%
Magnesium Silicate- 24.3%
Barium Sulphate 14.6%
Tinting Pigments 2.8%
100.0%

Vehicle 36.8%
Processed Linseed & Tung Oils 87.9%
Mineral Thinner & Drier 12.1%
100.0%

Benjamin Moore & Co.
House Paint Cream
Package Code- P 29 5530

Pigment 65.3%
Basic Lead Carbonate 49.0%
Zinc Oxide 18.9%
Titanium Magnesium Pigment 15.8%
Chrome Yellow 1.1%
Mineral Iron Oxide 0.1%
Magnesium Silicate 15.1%
100.0%

Vehicle 34.7%
Linseed Oil 84.4%
Japan Drier 12.5%
Turpentine 3.1%
100.0%

New Era Cream 140
Package Code- 1 A 140 1061 D

Pigment 64%
(1) White Lead 32.0%
Zinc Oxide 32.0%
Titanium Magnesium Pigment 36.0%
100.0%

Vehicle 36%
Linseed Oil 88.0%
Japan Drier 12.0%
100.0%

(1) Basic Lead Carbonate 17%
Basic Lead Sulphate 83%

Tinted with Pure Colors, Viz:
Venetian Red and Chrome Yellow

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Martin-Senour
Monarch Cream 501
Package Code- 501 M 2091

Basic Sulfate-White Lead	22.0%
Zinc Oxide	18.0%
Titanium Magnesium Pigment	23.5%
Coloring Material	0.9%
Linseed Oil	32.1%
Japan Drier	3.5%
	<u>100.0%</u>

John Lucas & Co.
Tinted Gloss Cream
Package Code- 279 F 150

Pigment 64%	
White Lead Carbonate	29%
White Lead Sulfate	21%
Zinc Oxide	39%
Ferric Oxide	2%
Silica & Silicates	9%
	<u>100%</u>
Vehicle 36%	
Linseed Oil	92%
Drier & Turpentine	8%
	<u>100%</u>

DuPont de Nemours E I & Co. Inc.
Cream 138
Package Code- C 492487 301 802

Pigment 61%	
Titanium Magnesium Pigment	43%
Zinc Oxide	33%
Basic Sulphate White Lead	17%
Titanium Oxide	7%
Tinting Colors	Trace
	<u>100%</u>
Vehicle 39%	
Linseed Oil	92%
Drier	5%
Mineral Spirits	3%
	<u>100%</u>

Lowe Brothers
High Standard Cream 305
Package Code- B 2101 305

Pigment 63.5%	
Basic Sulfate White Lead	29.5%
Zinc Oxide	25.5%
Titanium Magnesium	37.5%
Magnesium Silicate	6.5%
C. P. Chrome Yellow	.5%
Ferric Oxide	.5%
	<u>100.0%</u>
Vehicle 36.5%	
Linseed Oil	87.5%
Drier & Thinner	12.5%
	<u>100.0%</u>

Sherwin-Williams
Cream 462
Package Code- 462 C 2101

Pigment 63%	
*S-W Oxlo Lead-Zinc Pigment	50%
White Lead Carbonate	8%
Titanium Magnesium	13%
Lead Titanate	10%
Magnesium Silicate	19%
	<u>100%</u>
*Basic Sulfate White Lead	20%
Zinc Oxide	30%
	<u>50%</u>
Vehicle 37%	
Linseed Oil	87%
Japan Drier	13%
	<u>100%</u>

0007-SWP-044599

0007-SWP-000113969

Section III. Undercoaters and Exterior PrimersProcedure of Testing

Our testing procedure for the evaluation of the various primers was very similar to the procedure used in testing of house paints. The brushing tests were run on new wood panels so that they could be used in the determination of sealing properties. After the primers were applied they were dried for four days and then recoated with SWP Gloss White. The following morning the panels were inspected for flat spots which indicated any lack of sealing in the priming coat.

For the determination of hiding comparisons, the primers were brushed on contrast sheets at 470 sq. ft./gal. and were rated for hiding in numerical order from best to poorest.

With the exception of three products, all primers were quite satisfactory. Sears Roebuck's Master Mixed Undercoater #10 was definitely too sticky and Martin Senour's 350 primer was too high in viscosity for proper brushing qualities. Sear's primer and Moer-white primer were also too high in flow for this class of goods.

General Conclusion - Parts 1, 2, and 3.

In this evaluation we do not feel that the ratings that have been given to the various products are necessarily representative of general production. However, we do feel that any weaknesses, that are noted in the products as shown in this report, should be kept in mind and other production batches of the same material should be checked to see if it is a representative weakness of the particular formulation.

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0007-SWP-000113970

Chart No. 12

Undercoaters & Exterior Primers

<u>Material</u>	<u>Pkge</u> <u>Cond.</u>	<u>Settling</u>	<u>Stirring</u>	<u>Odor</u>	<u>Consist-</u> <u>ency</u>	<u>Grind</u>	<u>Wt/gal</u>
Sears-Master Mixed Undercoater	Ex.	Trace	Easy	Sweet	Thin (Normal)	1P	14.06
Moorwhite Primer	Good	Soft	Easy	Varnish	Thin (Normal)	1P	12.29
Monarch 350 Primer	Good	Slight	Easy	Normal	Medium (Sl.High)	1P	15.20
Ward-Master Painters Undercoater	Ex.	Trace	Easy	"	Thin body	OP	14.94
Devco-Undercoater #539	Fair	Firm to Hard	Diff.	"	Thin to medium	1P	14.96
Pittsburgh-Sunproof Primer	Good	Slight	Easy	"	Full body	OP	13.87
Lowe Bros.-High Std. Primer	Ex.	Trace	Easy	Thinner	Thin (Normal)	2M	14.94
Lucas-House Paint Primer White	Fair	Firm	Diff.	Sl.Sharp	"	OP	15.38
SW-Undercoater 450	Ex.	Trace	Easy	Normal	"	OP	15.46

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Chart No. 13

Undercoaters or Exterior Primers

<u>Material</u>	<u>Brushing</u>	<u>Hiding</u>	<u>Flow</u>	<u>(New Wood)</u> <u>Gloss</u>	<u>Dry</u>
Sears-Master Mixed Undercoater	Too much drag	Best-Gray	Considerable (Too High)	Eggshell	4 hr. "
Moorewhite Primer	Very Good	7th-Best	"	"	3 "
Monarch 350 Primer	Rather Sticky	5th-Best	OK	"	4 "
Wards-Master Painter's Undercoater	Free (V.Good)	6th-Best	Fair +	Low Eggshell	4 "
Devco-Undercoater #539	Slight Pull	8th-Best	Good	Eggshell	3 "
Pittsburg-Sunproof Primer	Slight Pull OK reduced	2nd-Best	Fair-	House Paint Gloss	5 "
Lowe Bros.-High Std. Primer	Very Good	9th-Best	Fair + Std.	Eggshell	3 "
Lucas-House Paint Primer White	Free (Good)	3rd-Best	Fair-	Low Eggshell	5 "
SW-Undercoater 450	Free (V.Good)	4th-Best	Fair +	Low Eggshell	4 "

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Primers

Sears, Roebuck & Co.
Master Mixed Undercoater
Package Code- 10 A F17 1R

Pigment	60.7%	
Basic Sulphate White Lead		37.9%
Titanium Dioxide		18.1%
Barium Sulphate		19.1%
Silicates-		24.9%
		<u>100.0%</u>

Vehicle	39.3%	
Linseed Oil		58.5%
*Tung Oil Varnish		22.3%
Drier		3.8%
Turpentine		2.1%
Mineral Spirits		13.3%
		<u>100.0%</u>

*Volatile	64.7%	
Mineral Spirits		100.0%
Non Volatile	35.3%	
Tung Oil		50.8%
Resins		49.2%
		<u>100.0%</u>

Martin-Sencur
Monarch 350 Primer
Package Code- 350 M 1621

Basic Carbonate White Lead	40.0%
Titanium Magnesium Pigment	24.0%
Linseed Oil	20.0%
Treated Oils*	9.0%
Japan Drier	3.0%
Mineral Spirits	4.0%
	<u>100.0%</u>

*China Wood Oil	50%
Mineral Spirits	50%
	<u>100%</u>

Devco & Reynolds
Devco House Paint Undercoater 539
Package Code- 539 3 L 10 T

Pigment	64.8%	
Titanium Barium Pigment		37.3%
Basic Lead Carbonate		37.8%
Magnesium Silicate		24.9%
		<u>100.0%</u>

Vehicle	35.2%	
Processed Linseed & Tung Oils		54.1%
Resins		4.1%
Mineral Thinners & Driers		41.8%
		<u>100.0%</u>

Benjamin Moore & Co.
Moorwhite Primer
Package Code- P91 5014

Pigment	51.6%	
Basic Lead Carbonate		36.1%
Titanium Magnesium Pigment		42.1%
Titanium Dioxide		9.7%
Silica		12.1%
		<u>100.0%</u>

Vehicle	48.4%	
Linseed Oil		40.0%
Other Drying Oils		14.4%
Japan Driers		10.8%
Mineral Spirits		34.8%
		<u>100.0%</u>

Montgomery Ward & Co.
Master Painter's Undercoater
Package Code- 1701 UC 11

Pigment	62.0%	
*White Lead		50.2%
Titanium Dioxide		7.1%
Zinc Oxide		15.7%
Asbestine		27.0%
		<u>100.0%</u>

*Basic Lead Sulphate	16.9%
Basic Lead Carbonate	83.1%
	<u>100.0%</u>

Vehicle	38.0%	
Linseed Oil		64.0%
Drier & Mineral Spirits		19.4%
Turpentine		16.6%
		<u>100.0%</u>

Pittsburgh Plate Glass Co.
SunProof Primer
Package Code- 1-201 D-1801

Titanium Oxide	6.9%
Magnesium Silicate	11.5%
35% Leaded Zinc Oxide	37.0%
Heat Treated Linseed Oil	20.7%
Raw Linseed Oil	21.6%
Mineral Spirits & Driers	2.3%
	<u>100.0%</u>

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0007-SWP-000113973

Lowe Brothers
High Standard Primer
Package Code- B 2041 260

Pigment	62.5%	
Basic Carbonate White Lead	61.0%	
Titanium Dioxide	10.0%	
Magnesium Silicate	29.0%	
	<u>100.0%</u>	

Vehicle	37.5%	
Linseed Oil	59.0%	
Tung Oil	2.5%	
Synthetic Resin	2.0%	
Drier & Thinner	36.5%	
	<u>100.0%</u>	

Sherwin-Williams
Undercoater 450
Package Code- 450 C 2271 A

Pigment	64.5%	
*SW Celo Leaded Zinc Pigment	16%	
Basic Carbonate White Lead	51%	
Titanium Magnesium	25%	
Titanium Dioxide	2%	
Silica & Silicates	6%	
	<u>100%</u>	

Vehicle	35.5%	
Linseed Oil	64%	
Drier & Mineral Spirits	36%	
	<u>100%</u>	

*Basic Sulphate White Lead	6%
Zinc Oxide	10%
	<u>16%</u>

John Lucas & Company
House Paint Primer, White
Package Code- T G P F 1391

Basic Carbonate White Lead	23%
Basic Sulphate White Lead	7%
Zinc Oxide	13%
*Titanium Pigment	13%
Magnesium Silicate	9%
Linseed Oil	24%
Turpentine	7%
Japan Drier	5%
	<u>100%</u>

*Titanium Dioxide	50%
Magnesium Silicate	50%

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0007-SWP-044604

0007-SWP-000113974