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Marshall Laboratory
February 19, 1951

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CROSS INDEX

69-771	Trade Sales
621-702	W-54
621-847	W-92
	W-49

LABORATORY MEMORANDUM REPORT NO. 334

EVALUATION OF SPECIALLY TREATED * "TI-CALS"
IN FLAT WALL PAINTS AND "DULUX" MILL WHITE EGGSHELL

INTRODUCTION

1. This memorandum report covers the results obtained from the evaluation of specially treated "Ti-Cals" KW-3843 vs. W-92, KW-3844 vs. W-54, and KW-3845 vs. W-49.

2. These pigments were evaluated in plant production (100 gallon batches each) of the following Trade Sales products.

- (a) 621-847 Interior Flat Wall Paint White
- (b) 621-702 T & C. Flowing Flat White
- (c) 69-771 "Dulux" Mill White Eggshell White

SUMMARY

Based on the evidence thus far accumulated from this evaluation, it appears that these pigments can be safely substituted for current "Ti-Cals" now used in the above products (see table attached). However, longer period is necessary to obtain color retention data.

DETAILS

(a) Two 100 gallon batches of each of the above products were made using the specially treated pigments in one case and the

N35442

controls in the other. The batches were made side-by-side thereby assuring the use of the same lot of vehicle in both batches.

(b) No manufacturing difficulties were encountered. The batches are identified as follows:

<u>Code</u>	<u>Batch No.</u>	<u>Pigment Used</u>	<u>Lot No.</u>
621-847	705535	W-92	---
621R-77935	705534	KW-3843	2090
621-702	705553	W-54/W-49	---
621R-77937	705552	KW-3844/3845	2099/2991
69-771	705551	W-49	---
639R-77933	705550	KW-3845	2091

All the batches were filled in 5² and put in warehouse as regular stock items.

(c) Exposure Series No. 12154 has been prepared to accumulate color retention data.

MARSHALL LABORATORY

B. *[Signature]*

BLM:aig

* The treatment involved is believed to be magnesium oxide which may or may not improve color retention.

TABLE

<u>Properties</u>	621-847 B#70535	P-621-R-77935 B#70534	621-702 B#70553	P-621-R-77937 B#70552	69-771 B#70551	P-69-R-77933 B#70550
Wt./Gallon	Spec. 12.45 12.5	12.58	Spec. 13.73 13.73	13.52	Spec. 13.35 12.8	13.10
<u>Viscosity</u>						
Initial (Stormer)	Spec. 87 88 + 3	89	Spec. 91 88 + 2	92	Spec. 112 115 + 5	112
One month "	99	94	92	89	135	142
<u>Application *</u>						
Brushing	V. Good	V. Good	V. Good	V. Good	V. Good	V. Good
Lapping (5 mins.)	V. Good	V. Good	Excellent	Excellent	V. Good	V. Good
<u>Drying</u>						
6-8 hours	Tack Free	Tack Free	Tack Free	Tack Free	Tack Free	Tack Free
16-18 hours	V. Good (Std.)	= To Std.	V. Good (Std.)	= To Std.	V. Good (Std.)	= To Std.
<u>Color</u>	Good (Std.)	= To Std.	Good (Std.)	= To Std.	Good (Std.)	= To Std.
Hiding	Good (Std.)	= To Std.	Good (Std.)	= To Std.	Good (Std.)	= To Std.
Flow	Good (Std.)	= To Std.	Good (Std.)	= To Std.	Good (Std.)	= To Std.
Sheen	Flat (Std.)	= To Std.	Flat (Std.)	= To Std.	Low (Std.)	= To Std.

* Checked by A. C. Krause

B. L. Mansi/aig
2/19/51