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Marshall Laboratory
April 25, 1967

**MARSHALL DEVELOPMENT LABORATORY SUPPLEMENTARY RELEASE LETTER #1997-C
REPLACEMENT OF SULFATE TiO₂ WITH CHLORIDE TiO₂ IN
603-LINE ALKYD HOUSE PAINTS**

No Approval Action Required

The attached covers the conversion of 603-Line Alkyd House Paints to the use of chloride process TiO₂, W-185, "Ti-Pure*" R-902 Hi Gloss. At the same time H-454, 10% solution of phenyl mercury oleate is replaced by G-796, 100% phenyl mercury propionate, at equal mercury content in another simplification towards obsolescence of H-454.

MARSHALL DEVELOPMENT LABORATORY

J. E. Oyler
J. E. OYLER

JEO:hfm

Attach.

*Registered Du Pont Trademark

APPROVED

R. W. Lawrence

DATE

4/24/67

APPROVED

DATE

MARSHALL DEVELOPMENT LABORATORY SUPPLEMENTARY RELEASE LETTER #1997-B
REPLACEMENT OF SULFATE TiO_2 WITH CHLORIDE TiO_2

Product or Line Number 603-Line Alkyd House Paints

Related Release Letter No. 1997-A

No Approval Action Required

<u>Sulfate Replaced</u>	<u>Chloride Replacement</u>	<u>Replacement Procedure</u>	<u>Change in Mill Cost</u>	<u>Stability Data Available</u>
W-28	W-123	Equal Wt. <u>X*</u>	None <u>*</u>	Months <u>12&18</u>
W-43	W-129	Equal Vol. <u> </u>	Increase <u> </u> ¢/gal.	Adequate <u>X</u>
W-50 <u>X</u>	W-131	Equal Hiding <u>X*</u>	Decrease*5.5¢/gal.	Inadequate <u> </u>
W-124	W-185 <u>X</u>		Tints Only	

New Standards Issued. Yes No X

Estimated Annual Consumption Change. Chloride Increase 283,000

Based on 1966 Production Sulfate Decrease 297,200

Active Formulating Practice Revised. Date

Formulating Practice to be Written. Yes No

Initial Chloride TiO_2 Formula Date.

*Nos. 40 and 42 Whites use W-185 at equal weight to increase hiding about 5-8%. Tints use W-185 to equal tinting strength, about 5% reduction, to effect slight cost savings.

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R. L. #1997-C

<u>Properties Thoroughly Evaluated</u>	<u>Compared to Std.</u>	
	<u>Equal</u>	<u>Variation*</u>
Shelf stability	X	
Chalk resistance	X	
Tint retention		X
Appearance retention		X
Cleanliness retention		X
Whiteness (whites)		X

*Better cleanliness and less yellowing result in improved appearance and an apparent if not actual improved tinting retention. Whites are less yellow initially and during exposure.

<u>Properties - High Spot Evaluation</u>	<u>Compared to Std.</u>	
	<u>Equal</u>	<u>Variation</u>

Production limited to laboratory batches of whites and several tints. Pre-alignment considered to be unnecessary.

List Critical Tests required for alignment beyond control testing

None