

Cross Reference:

670-760

633-762

Trade Sales

W-13

W-33

Punch Card Index

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Marshall Laboratory
September 14, 1951

LABORATORY MEMORANDUM REPORT NO. M-384

REFERENCE COPY

EVALUATION OF LITHOPONE EL-133
IN TRADE SALES PRODUCTS

NOT FOR CIRCULATION

CLASS "B" PROBLEM WS-66-2

INTRODUCTION

This report covers the results obtained from the evaluation of Lithopone EL-133 (KW-3901) versus W-13 and W-33 controls in 670-760 Interior Semi-Gloss and 633-762 Interior Gloss.

A shipment of 35,000 lbs. of this pigment (considered as excess stock by the Pigments Dept.) was shipped to the Phila. plant to be worked off. This pigment was evaluated in plant production (2-100 gallon batches each) of 670-760 Interior Semi-Gloss and 633-762 Interior Gloss.

SUMMARY

1. Based on the evidence accumulated from this evaluation, it has been definitely established that this pigment cannot be substituted for both W-13 and W-33 or for all the W-33 and an equal amount of W-13 in 670-760 Interior Semi-Gloss type formulation because of high gloss difficulty.

2. This type Lithopone could be substituted for W-13 in 633-762 Interior Gloss type product without encountering any difficulties with respect to initial properties except for slightly higher wt./gal. which is due to the lower oil absorption of this pigment compared to W-13.

ACTION TO BE TAKEN

There is no further action to be taken on this problem because:

1. Before the completion of this evaluation, this pigment (35,000 lbs.) was recalled by the Pigments Dept. and has been removed from the plant.

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2. Since titanium is now available, steps are being taken to revert the above products back to the all TiO_2 type formulations.

DETAILS

(A) Two 100-gallon batches of 670-760 Interior Semi-Gloss were made as follows:

1. P-670-R-87839-B #5115 replacing both W-13 and W-33 with KW-3901.
2. P-670-R-87845-B #5940 replacing all W-33 and an equal amount of W-13 (18.2 lbs.) with KW-3901.

Both batches resulted in high gloss (80) compared to 60 + 10 specs.

(B) Two batches (100 gallons each) were made of 633-762 Interior Gloss as follows:

1. P-633-R-87873-B #6610 replacing all the Lithopone (W-13) with KW-3901. This batch was within limits in all respects except color (overblued). This batch was bulked and worked off in 1000 gallons of 633-762 and another batch was requested.
2. P-633-R-87873-B #4158 was made and this batch was within limits for all properties except for slightly high wt./gal. 10.2 for 9.85 std. This batch was approved by central lab. and shipped as regular 633-762 Interior Gloss White.

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