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NEWARK PLANT
PIGMENT COLOR RESEARCH REPORT

Final Report

GT-354-D. ECONOMY FORMULA
SEMI-WORKS AND PLANT DEVELOPMENT.

Period Covered:

MAY 1945 to JULY 1946.

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FINAL REPORT

GT-354-D. ECONOMY FORMULA.
SEMI-WORKS AND PLANT DEVELOPMENT.

MAY 1945 to JULY 1946.

SUBMITTED BY: O. J. C. KLEIN

DATE SUBMITTED: 10/14/46

APPROVED BY: J. O. MORRISON

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O. J. C. Klein, Oct. 31, 1946.
J. O. Morrison
Oct 31, 1946

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INTRODUCTION:

K-2148 was developed in the laboratory as a more economical manufacturing process for GT-354-D. This report covers the semi-works and plant development of this color.

SUMMARY & CONCLUSIONS:

The status of GT-354-D at the end of the period covered by this report is as follows:

- (a) A plant formula, K-2298, was written, 2.5 times the size of the previous standard formula.
- (b) A new standard, lot 47489, SD-48441, was set up.
- (c) Plant assumed supervision of the color on July 1, 1946.

The new formula differs from K-2148 only in the addition of blanc fixe. It differs from the old standard formula, K-1631, in the following details:

- (a) Batch size increased 2.5 times, with same dye concentration but increased PTMA concentration.
- (b) Addition of 2.5% of blanc fixe.
- (c) PTMA solution is made and used at 180°F instead of 75°F.
- (d) Substitution of sulfuric acid for hydrochloric.

EXPERIMENTAL DETAILS:

Two semi-works batches made on the K-2148 formula were on the strong, blue side of standard.

Sixteen plant batches were made in the development program, four on the K-2148 formula, without blanc fixe, and twelve on the K-2298 formula, with addition of blanc fixe. No variations were made other than small changes of batch size to fit filter presses.

Details of the batches can be found in Development Section Notebook 46-45.

GLOSSARY:

GT-354-D: A PTMA toner of Brilliant Green B.
PTMA: Phospho-tungsto-molybdic acid complex.
Brilliant Green B: Chemical Index #662.