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NEWARK PLANT
PIGMENT COLOR RESEARCH REPORT

Final Report

GT-646-D. MAGNESIUM ROSINATE TREATMENT
FOR IMPROVED FILTRATION.
SEMI-WORKS AND PLANT DEVELOPMENT

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SEMI-WORKS AND PLANT DEVELOPMENT

JULY 1945 to MARCH 1946.

SUBMITTED BY: O.J.C. *Klein*
Oct. 30, 1946

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INTRODUCTION:

This report covers the semi-works trial of a laboratory Pigment Green B formulation designed to give improved pressing and washing, and the plant development work leading to the adoption of a new standard and formula.

SUMMARY & CONCLUSIONS:

1. A new formula, GT-646-D, K-2256, has been set up, including an increase in batch size from 2.9 to 3.32 mols, and a treatment with magnesium rosinate to give better filtration and washing.
2. A new standard has been established (GT-646-D, SD-48399, batch 8548) composed of the first six plant batches made using the above formula.
3. The pressing time of 12-16 hours, and washing time of 35-40 hours, represents an estimate made from widely fluctuating values of these data taken from plant runs.
4. No estimate of the improvement, if any, in filtration and washing times can be made.
5. Goal yield should be 715 pounds at 1.7% moisture, as determined by laboratory experiment, and checked by calculation.

EXPERIMENTAL DETAILS:

Semi-Works Batches: Three batches of 0.2, 0.4, and 0.6 mols were made on the K-2171 (magnesium rosinate treated) formula, and one 0.2 mol batch was made on the K-2183 formula (no magnesium rosinate treatment). The untreated batch was yellow in mass, strong and intense against the treated material, but all semi-works batches were strong and at least equal in intensity of tint to the old GT-646-D standard, and close to K-2171 in strength.

Filtration times were not comparable among the batches, so that any possible advantage due to the magnesium rosinate treatment was not observable.

Plant Batches: In the plant 20 batches were made on the K-2171 formula, two at 1.9 mols, the remainder at 3.32 mols. The unusual operating difficulties were encountered, and a standard mix was made of equal parts of the first six batches.

Pressing and washing performance cannot be evaluated because the press was doubled in size at the time the K-2171 formula was introduced. Therefore, there are no old type GT-646-D batches (K-1913) pressed under present conditions, with which to compare current batches.

Details of experimental work can be found in Development Section Notebook 46-42.

GLOSSARY:

GT-646-D: Pigment Green B - Iron salt of nitroso beta naphthol
containing sodium oleate and magnesium rosinate.