

E. I. DU PONT DE NEMOURS & COMPANY
KREBS PIGMENTS DEPARTMENT
256 VANDERPOOL STREET
NEWARK, NEW JERSEY

NEWARK PLANT
PIGMENT COLOR RESEARCH REPORT
Final Report

CHROME GREENS
MANUFACTURE BY DRY BLENDING

Period Covered

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CHROME GREENS
MANUFACTURE BY DRY BLENDING

AUGUST 1948 - MAY 1949

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SUBMITTED BY: J. O. MORRISON

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APPROVED BY: B. H. PERKINS

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INTRODUCTION:

This report summarizes a study directed toward the manufacture of the medium and darker masstone members of the G-550-D and G-604-D Chrome Green lines by dry blending of appropriate blue and yellow component pigments.

SUMMARY:

The study, prompted by forecast of attractive savings and initially promising technical performance, was beset by many delays caused by mechanical factors and complicated by quality aspects and shifting goals. It was terminated because of drastic shrinkage of forecast savings as the result both of reduction in sales volume and increase in complexity of the dry blending process. At the time of discontinuance, the process appeared to be technically sound, subject however to probable continuance of high equipment maintenance costs.

During the course of the study more than 500,000 lbs. of dry blended greens were produced commercially and sold. During a market period when customer complaints were numerous, no justifiable complaints were ultimately attributable to the dry-blending process per se. Extensive Sales Service evaluation in five different vehicles subsequently confirmed the satisfactory quality of dry blended products (although contrary conclusions were reported as the result of erroneous analysis of the data).

As a by-product of the program, an iron blue of superior color and texture, B-300-D, was developed, standardized, and released for sale.

Experimental attempts to substitute a continuous blending process, using a Sprout Waldron mill, for the Muench mixer batch blending process failed because of unsatisfactory dry appearance of the experimental products.

PATENT SITUATION:

The dry blending process for manufacture of chrome greens does not appear to be patentable.

RECOMMENDATIONS:

Since the dry blending process for manufacture of chrome greens, as finally developed, offers little promise of significant saving in manufacturing cost compared to the conventional slurry blending process, no further study appears desirable at the present time. Technical and economic summaries of this program which are filed in DSN 51-2 should be reviewed in case future conditions warrant reconsideration of the desirability of proceeding with the study.

REFERENCES:

A complete file of pertinent correspondence is filed in DSN-51-2.

Three letters which provide adequate technical and economic summary of the study, and are filed in the above reference, are:

D. B. Killian to J. E. Booge, May 19, 1949.

C. D. Atkinson to R. A. Kaiser, April 29, 1949.

G. Lois to J. H. Bailey, May 24, 1949.

JON:lg