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NEWARK PLANT
PIGMENT COLOR RESEARCH REPORT

RT-500-D, SEMI-WORKS AND PLANT DEVELOPMENT AND
STANDARDIZATION

Period Covered: February 1945 - July 1946

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NEWARK PLANT

PIGMENT COLOR RESEARCH REPORT

Final Report

Title: RT-500-D, Semi-Works and Plant Development and
Standardization

Period Covered: February 1945 - July 1946

SUBMITTED BY: E. J. Hess *E. J. Hess*

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INTRODUCTION

Semi-Works development work on RT-500-D, an automotive red, was suspended in May, 1941, as a result of wartime conditions (see KN-42-265).

Development and production was resumed in February, 1945, upon the request of the Sales Department, to supply material for evaluation work and to fill sample orders.

SUMMARY AND CONCLUSIONS

Semi-works production on the laboratory K-1000 formula averaged close to the RT-500-D Semi Works standard, lot 3791, in both lacquer and alkyd enamels although there was some tendency to go very slightly dark in masstone.

Similarly, in the plant, an approximate 1.3 mol K-1000 type formula gave a close match to standard in lacquer and alkyd and there seemed to be no necessity for running a large scale variable study to obtain satisfactory quality control.

A blend of three plant batches, lot 47958, which was a very close check to the Semi-Works standard in lacquer and alkyd, was set up as the plant RT-500-D standard, SD #48461 and a new plant type standard formula, K-2379, was written.

Supervision of RT-500-D manufacture was turned over to the plant in July, 1946.

DISCUSSION

Semi-Works production on the K-1000 formula was started in February, 1945 and continued intermittently through August, 1945, in order to fill sample orders. All five batches made were very slightly dark in masstone in lacquer and alkyd versus the standard, lot 3791. Rubout masstones were dark, with strength and tint being close to the standard.

As lot 3791 was in extremely short supply a mix of the first two Semi-Works batches made in this series was set up as a sampling standard, SD #48366. This material, given lot number 8030, was never officially set up as the RT-500-D standard. It was, however, a close check to lot 3791.

Plant production was started in March, 1946. The first three batches finished up close to lot 3791 and a plant standard, lot 47958, was set up from a blend of this material. A formula based on the plant procedure used was coded RT-500-D, K-2371. A slight error in the calculation of the buffer salt (sodium acetate) was corrected in a subsequent formula, K-2379.

The very consistent quality results being obtained made it possible to turn over supervision of manufacture to the Operating department without further development work.

EXPERIMENTAL DETAILS: DSN-46-52

GLOSSARY

RT-500-D: A coupling of Para chlo ortho nitraniline and
"Naphthanil" ASD.

"Naphthanil" ASD: The ortho teluidide of Beta hydroxy naphthoic
acid.