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NEWARK, NEW JERSEY

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NEWARK PLANT
PIGMENT COLOR RESEARCH REPORT

PIGMENT SCARLET: SF-28 and RL-211-D.
PLANT MANUFACTURE. SICK LIST STUDY.

Period Covered: April 1946 to July 1946.

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Final Report

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SUBMITTED BY: O.J.C. Klein
O.J.C. Klein, Nov. 1, 1946

DATE SUBMITTED: 9/13/46

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Nov 4, 1946*

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INTRODUCTION

Due to consistent production of dark, dull masstones in RL-211-D, work request No. 44 for assistance to the plant was issued. This report covers the work done toward correcting the dark, dull masstones.

Dark, dull masstones have been a recurring difficulty since anthranilic acid of technical grade was substituted for the previously used re-sublimed product. The technical anthranilic acid has been of fluctuating quality. A formula for SF-28, K-1684, was once written, incorporating filtration of the diazo as a remedy, but it was never adopted as standard procedure.

SUMMARY AND CONCLUSIONS:

By clarification of the diazo in the SF-28 dye manufacture a marked improvement in RL-211-D quality was attained. However, the quality deficiency was not completely remedied, and a new standard, representative of presently attainable quality, was set up.

The status of the problem at present is as follows:

(a) A new formula for SF-28, Pigment Scarlet Dye, K-2345, was written, providing for clarification of the diazo. Use of dye made on this formula gives RL-211-D of greatly improved quality. In plant practice the intention is to omit clarification when the appearance of the diazo indicates that it is warranted.

(b) A new standard, S.D. 48468 (lot 48055) has been set up. It is a mix of batches made from dye manufactured on the new formula. The rating of this standard against the previous standard SD #47996 (lot 32046) is as follows:

<u>Masstone</u>	<u>Strength</u>	<u>Tint</u>	<u>Lightfastness</u>
s. dull	vvs strong	vs intense	equal

(c) A goal yield determination on RL-211-D confirms the old figure to within 0.1%.

(d) Control was resumed by the plant on June 20, 1946.

EXPERIMENTAL DETAILS

Beginning in April, all SF-28 diasos were clarified. Improvement was immediate, and the plant took over control as soon as consistency was demonstrated.

Details of the batches of SF-28 and the RL-211-D made from them appear in DSN-46-48.

REFERENCES

SF-28, K-2345, formula and notes.
Development Section Notebook - 46-48.

Glossary

SF-28: Pigment Scarlet dye - a di-sodium salt of a coupling of diazo anthranilic acid with R salt.

RL-211-D: An alumina hydrate lake of Pigment Scarlet dye using Barium chloride as a precipitant.