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PIGMENTS DEPARTMENT
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NEWARK, NEW JERSEY

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NEWARK PLANT
PIGMENT COLOR RESEARCH REPORT

Progress Report

Improved Texture Molybdate Orange ~~E-2240~~ H-2398

Period Covered:

April 1944 to December 1944

FILE:

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PIGMENT COLOR RESEARCH REPORT
Progress Report

Title: Improved Texture Molybdate Orange ¹⁵⁻²³⁹⁸ ~~K-2240~~

Period Covered: April 1944 to December 1944

SUBMITTED BY: V. Chalupski

DATE SUBMITTED: 11-20-45

V. Chalupski Nov. 27, 1945
APPROVED BY: V. Chalupski

DATE ISSUED: 11-30-45

INTRODUCTION

After an inactive period of several years, work on the improvement of texture of Molybdate Orange to "HY-CAP" level was resumed in the semi-works and plant in 1944, and a tentative plant standard was set up at the conclusion of the work. No regular production was carried out because of wartime restrictions.

SUMMARY AND CONCLUSIONS

Earlier large scale study had shown that "HY-CAP" texture could be imparted to YE-421-D by a slurry treatment with 2% Petronate plus 1% of Turkey Red Oil (reported in Research Report KN-42-289). These results were checked in 1944, in the semi-works and plant; a mix of three plant batches, lot 44373, made in this way was set up as a tentative standard sample for this process, which is coded K-2240. Altho the K-2240 sample was not completely evaluated, tests indicated that it would be satisfactory as a replacement for the regular YE-421-D. Tinctorial properties were passable, altho the masstone was somewhat light in H-108 rubout; livering properties in ink were satisfactory and the texture compared as follows with standard Molybdate Orange:

	<u>2XL</u>	<u>6XL</u>
YE-421-D Standard	13+	15-
²³⁹⁸ K-2240, Lot 44373	16	17-

A yield study was run to determine the increment in yield due to the treating agent. The cost of the agent is higher than the added value in yield, so that the texture treatment costs 14¢ per hundred pounds of pigment.

The use of Soya Lecithin had given some indication of promise in the laboratory, and it was, therefore, tried in the plant. One-half percent and one percent treatments of the slurry did not give the desired improvement in texture.

A new standard formula was not written for the "HY-CAP" material, pending plant standardization work, which has not been authorized by the Sales Department.

EXPERIMENTAL DETAILS

Laboratory yield studies - see N.B. 1105, exp. 47

Semi-works and plant studies - see Development Section
Data Book DSN-45-26