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PIGMENTS DEPARTMENT
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NEWARK, NEW JERSEY

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NEWARK PLANT
PIGMENT COLOR RESEARCH REPORT

BENZIDINE TYPE YELLOW (DCB-2AAOT):
SEMI-WORKS TRIAL OF K-2194.

Period Covered: October 1945.

FILE:

DATE: 7/11/46

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NEWARK PLANT

PIGMENT COLOR RESEARCH REPORT

Progress Report

Title: Bensidine Type Yellow (DOB → 2AAOT):
Semi-Works Trial of K-2194.

Period Covered: October, 1945.

SUBMITTED BY: M. G. Taber

DATE SUBMITTED: 3/7/46

APPROVED BY: J. O. Morrison

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J. O. Morrison
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INTRODUCTION

K-2194, a benzidine type yellow prepared from dichlor benzidine coupled with aceto aceto orthotoluidide, was developed in the Organic Laboratory as a counter offering to competitive pigments of the same class, such as Harmon's YB-2 and Imperial's Sumatra Yellow X-1940.

The DSB → AAOY pigments are superior to the YT-553-D type in light-fastness but are more expensive.

This report covers initial semi-works trials of K-2194.

SUMMARY AND CONCLUSIONS

One 30-pound batch of K-2194 was made in the semi-works. Part was dried at 140°F. (lot 8468) and part at 120°F. (lot 8469). Both lots 8468 and 8469 were equal in strength to K-2194, while 10% weaker than Harmon's YB-2. In ink properties 8468 and 8469 were slightly heavier in body than K-2194 and distinctly heavier than Harmon's YB-2. Primarily because of the strength deficiency. They are not considered satisfactory counterparts for the Harmon color, and development work has been discontinued pending additional laboratory study.

EXPERIMENTAL DETAILS

Lot 8468 and Lot 8469 were equal in tinctorial and ink properties by both rubout and ink tests. This indicates that K-2194 is not as sensitive to heat as the orthodox benzidine yellow.

Further details are recorded in DSN 45-1 and the Ink Laboratory Memorandum Report.

REFERENCES

DSN 45-1

Ink Laboratory Memorandum, Jan. 7, 1946.

KN-45-43 Final Report: New Benzidine Type Yellows.