

Serial No. KN-51-34

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NEWARK PLANT
PIGMENT COLOR RESEARCH REPORT

Final Report

AYL-648-D WHITING LAKE OF YT-565-D (DIANISIDINE $\Rightarrow$ AAPCA₂)
FOR ARMSTRONG CORK COMPANY

Period Covered

OCTOBER 1950 - FEBRUARY 1951.

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Final Report

AYL-648-D WHITING LAKE OF YT-565-D (DIANISIDINE $\rightarrow$ AAPCA₂)
FOR ARMSTRONG CORK COMPANY

OCTOBER 1950 - FEBRUARY 1951.

CHARGE: A-IC-48

SUBMITTED BY: G. Grimm *GG*

DATE SUBMITTED: 4/12/51

APPROVED BY: A. A. Brizzolara *A. A. Brizzolara*

DATE ISSUED: 4/25/51

INTRODUCTION:

The Sales Department requested the preparation of a lake of YT-565-D (DA $\Rightarrow$ AAPCA₂) on whiting for Armstrong Cork Company, approximating the strength of YE-421-D, Molybdate Orange. The lake has been prepared in the laboratory but not developed further because of loss of interest in the product by Sales.

CONCLUSIONS:

A six pound sample, 1159-21, has been prepared from a laboratory YT-565-D coupling, containing 22% toner on whiting. By rubout it was found to approximate the strength of YE-421-D with a yellow tint and masstone. Its properties in linoleum on a comparable basis (at equal toner content) were equivalent to YT-565-D, having a yellower tint, poorer lightfastness and about the same resistance to acetic acid and soap solution as YE-421-D when compared with the Molybdate Orange. Resistance to Tide or caustic was markedly better than YE-421-D.

The process AYL-648-D has been written and a sample of 1159-21 filed in the "K" file (3376).

DISCUSSION:

The sample was prepared by neutralizing a laboratory YT-565-D coupling with whiting and adding a calculated weight of additional whiting to extend the toner to a 25% lake. Some foaming was encountered, making the pH adjustment difficult to control; consequently, the yield was high resulting in a product containing only 22% toner. The rubout results were as follows:

	<u>MT</u>	<u>DD</u>	<u>STR.</u>	<u>TINT</u>
1159-21 vs YE-421-D (SD-92590)	yellow, intense	trans. yellow	equal	yellow, intense
1159-21 vs YT-565-D(SD-406) Whiting	75%)vs blue 25%)vs dull	vs blue	weak (110=100)	vs blue

EXPERIMENTAL DETAILS:

Refer to Notebook 1159 - Expt. 21

LINOLEUM EVALUATION

SAMPLE

Masstone

Color change on cure	none	vs poor	Std.	none
Cured color	vvs yel.	intense	"	blue, dark
Lightfastness, 24 hr.	tr. poor	vs poor	"	tr. better
48 hr.	tr. poor	vs poor	"	tr. better
72 hr.	vs poor	vs poor	"	tr. better
Acetic Acid immersion	s poor	s. better	"	equal
Caustic immersion	equal	s. better	"	"
Tide	vs poor	s. better	"	poor
Soap	vs poor	equal	"	

Extension at equal toner content

Color change on cure	s. poor	vs poor	Std.	equal
Cured tint	yel. ints.	yel., ints.	"	blue, int.
Cured strength	strong	strong	"	strong
Lightfastness, 24 hr.	s. poor	s. poor	"	better
48 hr.	poor	poor	"	equal
72 hr.	v. poor	v. poor	"	poor
Acetic Acid immersion	vs poor	vvs poor	"	equal
Caustic immersion	better	better	"	better
Tide	"	"	"	"
Soap	vs poor	vvs poor	"	equal

Extension at equal pigment content

Color change on cure	equal	vs poor	Std.	equal
Cured tint	yellow	yel., int.	"	blue
Cured strength	equal	strong	"	equal
Lightfastness, 24 hr.	s. poor	s. poor	"	s. poor
48 hr.	poor	poor	"	poor
72 hr.	v. poor	v. poor	"	v. poor
Acetic Acid immersion	equal	equal	"	vvs. better
Caustic immersion	better	better	"	better
Tide	better	better	"	better
Soap	s. poor	vvs poor	"	equal

AYL-648-D
1159-21

YT-565-D
SD-406

YE-421-D
SD-52590

RL-544-D
SD-48554

AAPCA₂

Aceto-acido-para-chloro-anilide