Glidden QUALITY PRODUCTS

CITY Cleveland, Ohio DATE March 27, 1950 FOR

SUBJECT PRODUCT DEVELOPMENT REPORT - FEBRUARY

ANSWERING LETTER OF

The February report shows the development of improved trade sales formulations principally in the exterior house paint lines at no increase in costs and in some cases savings have been made. In several of these formulas VR-49098 our offset for Drisoy Heavy Bodied is being used.

The tests in Japalac on the use of various grades of lecithin show that after one year non-yellowing properties are unaffected.

Magnesium silicate tests are of decided importance in exterior house paints. It has been found that Nytal 200 gives decidedly better fineness of grind in house paint production. These tests are continuing.

Lower costs are still the problem at Nubian as well as the other laboratories involved in industrial developments. The varnishes being tested at Nubian should prove to be of decided interest particularly as they hope to develop such varnishes in the low price range on a solids basis.

The Nubelite developments show the necessity of continual work on improving the characteristics of their white enamels in order to meet their customers' demands.

Reading's developments on low priced chassis blacks is being followed closely.

It is also interesting to note Reading's development of a white vinyl collapsible tube coating. The tube industry is eventually replacing the oleoresinous type coating with synthetics which will have greater resistance to discoloration and greatly increased chemical resistances.

Reading's work on finishes for glass Christmas tree ornaments is outstanding. They will evidently enjoy a large volume of business through their approvals.

Reading's work on synthetics, particularly the Epons and the heat-reactive phenolics should prove to be of value.

Toronto continues to develop various finishes for Ford Motor with success. They are also continuing to produce a number of metalescent and hammerloid finishes.

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H. W. Dell

HWD/lms

NUBIAN

ANALYTICAL, RAW MATERIAL & PHYSICAL TESTING DEPARTMENT

FEBRUARY 1950

During the month of February we tested a total of 322 shipments of raw materials, all of which were approved and accepted.

Last October and November we noticed a sudden decline in the hiding of G-48 from Calco Chemical Division. Later we found a similar decrease in hiding on shipments of G-48 from du Pont and from Imperial Paper & Color Company. A decrease of about 25% in hiding power was noted when these pigments were used in actual formulations. This necessitated increasing the G-48 in our enamels accordingly. In February we analyzed samples of these shipments, as well as our Cleveland Standard G-48, for Lead Chromate content, with the results shown in the accompanying table.

Mfgr.'s Designation	Manufacturer	Our Analysis Lead Chromate	1945 Lead Chromate	1947 Chrome Yellow
Cleveland Standard	-	74.6%	-	-
Norwood L 10-8100	Calco	71.4%	94.5%	94.5%
"Hy-Cap" Ex. Lt. G-550-D	du Pont	68.7%	95.0%	95.0%
A-4062 Glen X Lt.	Imperial	72.8%	73.5%	94.3%
RCL-1860 C.P. Lt. Chrome Green	A. Wilhelm Co.	-	90.5%	-

The designations "1945 Lead Chromate" and "1947 Chrome Yellow" refer to the published analyses of these pigments in the Pigment Index of 1945, and of 1947, issued by the National Paint, Varnish & Lacquer Association. It will be noted that our Lead Chromate determination on the Imperial sample agrees fairly closely with the 1945 listing, but that our determinations on the Calco and du Pont samples are far lower than the published values. When we brought these discrepancies to the attention of the manufacturers, we were told that the "Lead Chromate Content" really means "Chrome Yellow Content", and that Chrome Yellow consists of varying percentages of Lead Chromate and Lead Sulfate. This accounts for the change from "Lead Chromate" to "Chrome Yellow" in the analysis column of the Pigment Index for 1947. Although our actual analyses of the Calco, du Pont and Imperial pigments show a lower content of Lead Chromate than that of the Cleveland Standard G-48, the differences are not enought to account for the decrease in tint strength and hiding power. If any of the other Glidden Paint Divisions have had similar experiences with G-48, we would appreciate hearing about them. In the meantime, we are planning to have conferences with representatives of the pigment manufacturers in the near future to discuss the problem.

A. Lucangioli