



GLD007008

CLEVELAND

TRADE SALES PROGRESS REPORT
APRIL 1952

House Paints

A new anti-mildewing agent, Vancide #89, being sold by Vanderbilt Company has been examined for use in house paints. Samples of Y-1800, Y-1312 and Y-1828 have been put on exposure at New Orleans. Vancide #89 imparts a yellowish color to a white house paint even more so than the recommended amount of Mildew-X.

Resinated Drier D-15 vs. Naphthenate Drier

Two experimental paints, comparing the two types of drier, have been on exposure 36 months @ 45° South, and have reached a point where tests may be discontinued.

The paint containing D-15 as the drier has much better durability than the paint containing naphthenate drier. There was little difference between the paints up to 24 months, at which time the paint containing naphthenate drier indicated that it was about to show failures. At the end of the test it shows more cracking, checking and flaking. The degree of chalking has been about the same.

Primers for Aluminum

Final report on our study of Aluminum Primers is given herewith:

Purpose: To determine what type of primer may be recommended for painting aluminum siding, doors and other aluminum surfaces by the home owner, where the aluminum is not given a finish by the fabricator.

Materials and Panel Preparation: Details have been given on previous reports.

Observations: Data taken after 24, 30 and 46 months are shown in the attached tables. The primers were all given finish coats of Duracure White Y-1800. Forty-six months @ 45° South is probably quite a period past the time advisable for repainting, but we wanted to carry the tests to a point where the difference of the integrity of the primers was shown.

Conclusions: Exterior Base Coat Y-1851 is a satisfactory primer if repainted at proper intervals; i.e., before top coats have eroded away.

Ready-Mixed Red Lead Y-506 gradually eroded away by itself. It, however, showed brittleness and poor adhesion throughout the test and we would not recommend the use of such a primer. A. D. Red Metal Primer 44-R-9 film while still intact after 46 months, it is quite brittle and shows poor adhesion. We would not recommend this primer.

The best primers were Red Chromatized Primer Y-560, M1525 Chromate Primer Y-562, Rust Resisting Primer 45-R-9-D, and Zinc Chromate Primer GL-50320-C. We would rate the first three of these about equal and better than GL-50320-C.

Y-1851-D and Y-560 would be available in most of our retail outlets and would be very satisfactory.

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Ceco Steel Products

The above customer is making landing mats for the army and requested an Olive Drab Enamel which would meet Federal Specification TT-E-485-B, Type I.

A service call was made by our Service Department to inspect the customer's set-up and a report followed giving all pertinent information. All laboratory tests were conducted with this in mind. We tried to simulate as closely as possible the conditions in the customer's plant.

41-G-947 was formulated and approved. Ceco Steel placed an order for 600 drums of this material.

41-G-947 matched #108 O.D. Army 3-1 color chip. Subsequent to making this formulation information was received to convert Type I materials to the new color which is #1405 Green (Federal Specification for Ready Mixed Paint).

This was done in formulation 41-G-947-A at a saving of 12 to 13 cents per gallon over 41-G-947. A 10 drum production of this material has been made.

Both formulations follow:

41-G-947:

YW-2	2-13/16 lb.	CH-185	1/32 lb.
B-96	7/16 lb.	NVL-2021	2 pts.
R-202	1-7/16 lb.	V-850-A	5 pts.
R-125	7/16 lb.	S-131	1/4 pt.
W-33	3/4 lb.	Comsolv #5	3/4 pt.
W-10	13/16 lb.	CH-171	3/8 oz.
W-150	2 lb.	VM-430	1 oz.
X-2280	1/32 lb.	VM-433	1/2 oz.

Viscosity (Stormer) 95 KU @ 60° F.
Wt/Gal 13.25 lb.
Gloss 15° on standard test panel
Reduce for dip 3 to 1 with Comsolv #5
Bake 10 min. @ 350° F.

41-G-947-A:

#1298 C.P. Chrome Yellow*	2-1/2 lb.	CH-185	1/32 lb.
R-202	1-3/8 lb.	NVL-2021	2 pts.
W-33	11/16 lb.	V-850-A	5-1/2 pts.
B-96	5/16 lb.	S-43	1/2 pt.
W-10	1-1/2 lb.	CH-171	3/8 oz.
W-166	1 lb.	VM-430	1 oz.
R-125	1/8 lb.	VM-433	1 oz.
X-2280	1/32 lb.		

Viscosity (Stormer) 97 KU @ 80° F.
Wt/Gal 12.6 lb.
Gloss 21° on standard test panel
Reduce for dip 3 to 1 with Comsolv #5
Bake 10 min. @ 350° F.

* Reichhold Chemicals

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Analysis:

Pigment 32.8%
Vehicle 67.2%

Pigment (Lead chromate 32.07%
(Red lead 17.78%
(Zinc oxide 9.17%
(Inerts & tints 40.34%

Vehicle 51.6% Vehicle solids

W. Fues
W. Miller

#3205 Black Roll Coating Enamel - SB-3205

We have recently received an approval from Rheem Mfg. Company of our #3205 Black Roll Coating Enamel for use on Rheemcote drums. It is, to our knowledge the first approval of any material of this type formulated at Glidden for end use at the Chicago plant of Rheem.

SB-3205 will produce an acceptable roll coat film when baked at 18 minutes at a peak heat of 300° F., the preferred schedule, although customer has indicated he will for specification testing only increase this temperature somewhat in order to accomodate prospective suppliers of slower curing finishes. We have found that this might be necessary in order to bake out the light color enamels used, such as Shell Red, Ivory and White.

The particular points in Rheem's specification which have been rather troublesome in the past are as follows:

1. Preferred bake is 18 minutes at peak heat of 300° F. This is more than enough where the vehicle used can be a fast curing linseed modified alkyd such as used in SB-3205. In whites and light colors, where color retention is an important factor, a low bake such as this has proved insufficient.
2. Materials shall fabricate satisfactorily for a period of at least one week after being coated and baked. This has been where our samples of white roll coat have failed to meet specification. Loss of adhesion around bends and stampings was very evident within 24 hours' ageing. Our success with SB-3205 leads us to believe that the white is undercured and cheesy instead of being too short and brittle as was first believed.
3. Materials shall resist a stacking pressure of 9 pounds per square inch, immediately after coming out of the oven. This seems necessary due to the speed of Rheem's production line. Unfabricated sheets are roll coated, immediately transferred to the oven, baked for 18 minutes and then stacked while hot. SB-3205 will take this without showing scuff marks or pressure indentations. Our latest whites, such as SW-4247, which is a soya modification (1085 Aroplaz) will also stack properly, but will not fabricate.