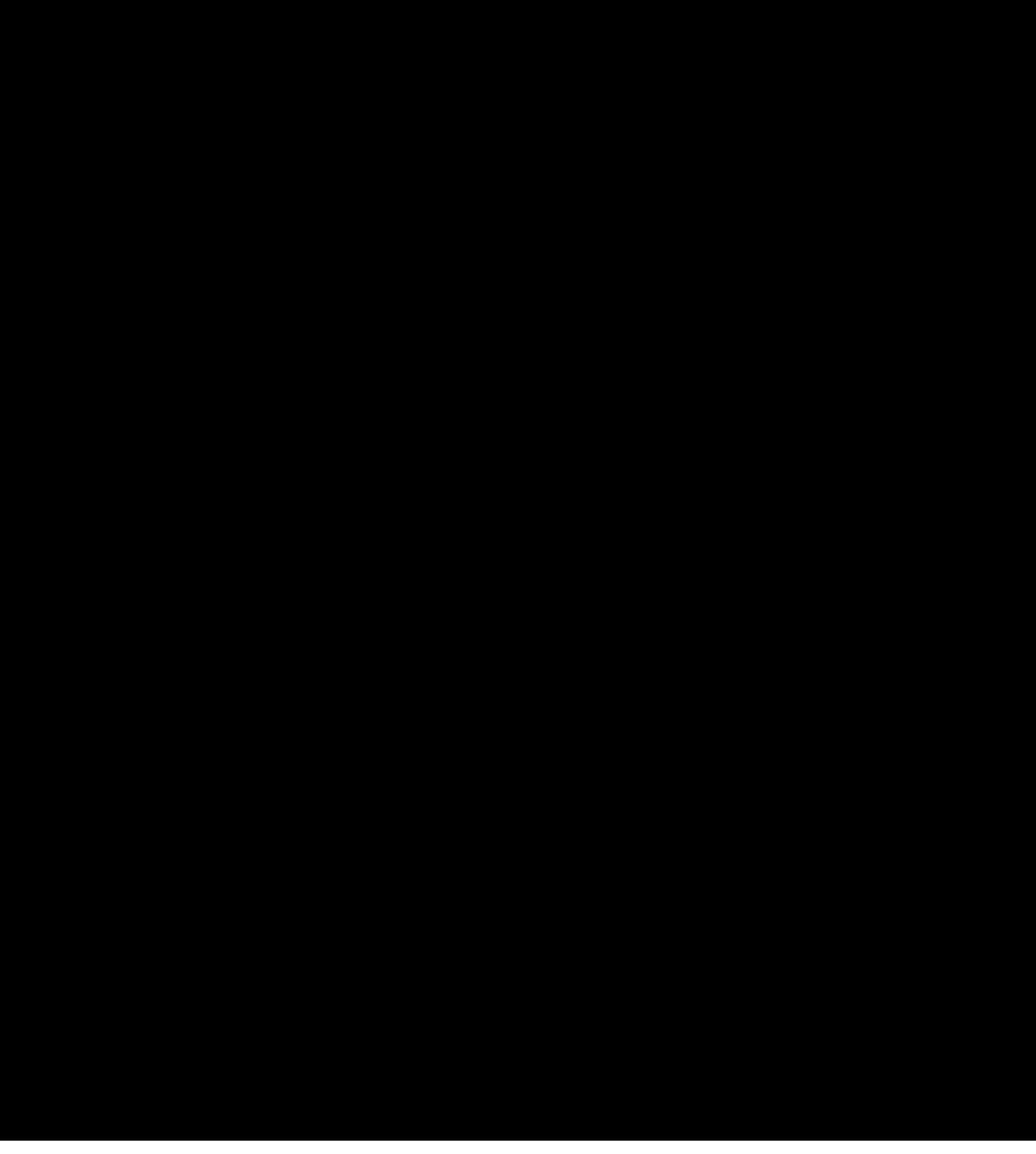




41400
- 1104 - 7.270
h.7

244-53.6

In regard to house paint tints, some day we may wish to use rutile titanium as the white pigment in view of its greater tint retention and the high cost of lead. We do have some houses painted which have been on exposure for a year and the color retention is very good. There is also a possibility of improving our house paint primer by replacing the anatase with rutile. Krebs have tests which indicate that even though the primer is not exposed the use of rutile improves the durability of the top coats. We likewise have exposure tests under way. We do not anticipate this change for some time.

Second grade house paint known as Everon, Y-2200-K, based on soya-wood oil vehicle was developed and turned over to the sales department. A set of exposure tests appeared to be satisfactory for this type of paint. This is more of a quality second grade paint. Some thought has been given to changing this formula to an all soya paint. However, in view of the closeness of the price of treated soya to wood oil there would not be any great saving other than the fact the paint could be marketed as an all soya paint. The vehicle is now based on 60 per cent soya and 40 per cent wood.

In regard to the development of a new Endurance and Master Painters Flat, it has been our policy to follow good paint practice and recommend a primer sealer over porous surfaces. However, one coat flats have been introduced on the market which are based on limed vehicles with a high pigment ratio. These flats do not have the quality of our regular flat. In view that they did meet the popular demand in regard to fool-proofness over porous surfaces it was decided to retain the quality of our old flat and at the same time improve the hold out properties over porous surfaces. Extensive tests have been made in both the laboratory and in the field and the flat does perform satisfactorily. This formula is known as Y-4700-B.

The new flat utilizes polymerized oil rather than the lime treated as we have found any savings the lime treated oil may have is offset by the required use of special colors. Polymerized oil also gives a harder drying film.

This is the second time this flat has been changed within six months. The first time the formula was changed to step up the hiding with titanium calcium pigment and was well received by the trade. Both changes were made at the request of the sales department and are only mentioned to show the continued work on trade sales products which at times seems to be necessary to meet competitive conditions.

There is a considerable demand in the trade for a low cost one coat enamel. These enamels are generally based on a plasticized rosin vehicle and there is little or no profit in their manufacture and sale. In order to have an enamel with special advantages it was decided to make a higher grade product in volume and which would have special advantages over other type enamels used by the Master Painters. The last part of the year this was accomplished in our new Y-5045. This enamel has the unusual easy working in comparison with other enamels and its

104 - 2.45 - Cream
2.35 - 41800
2432 - 41850
2.34 - 42000
used to
be 204
lead.

3/10
all pigments
1.6565
1596.8
25904.2
Y-2200-K - 1.63

Tio-Mg-27
35% LX - 25.4
41740 - 16.3
Mg Si - 5.4
Ca 103 - 25.9

2.14 - 19
5.47 - 25
WO - 18
SVS - 32
PA - 6

1948

1949

hold-out properties over porous surfaces are remarkable. Most enamels applied to porous surfaces or beaverboard will soak in whereas this type of enamel will present a good appearance. In this particular enamel we are using competitive vehicle and we are studying this further in an effort to determine the reason for its excellent hold-out and easy working properties as undoubtedly we can not only produce it at a lower price but also these properties should be of interest in other vehicles. For example, easy brushing is analagous to easy spraying and with the cost of labor as high as it is we may obtain a lead on how to develop an easy spraying vehicle.

In order to continue to meet competitive conditions we can expect our expenditures for 1949 to be in the same ratio as the first quarter - this will mean an expenditure of \$20,000 for the year.

PETROLEUM DRYING OILS

\$2,939.95 \$394.00

A joint program has been in existence between the Glidden Company and the Universal Oil Products Company to investigate and exploit a synthetic drying oil known as "Univoil." Twenty-eight different U.O.P. oils were studied as well as a number of competitive products. Copolymers of these oils with vegetable oils and two maleic adducts were also investigated. The Univoils alone yield films which are brittle, thermoplastic and have poor resistance to weathering. Formulation along the lines of typical varnish practice indicates that the presence of fairly small amounts of the petroleum oil or its products deteriorates a film with respect to outdoor durability and induces brittleness. Fractionation of the complex mixture of compounds known as Univoil with solvents, oxidation with various reagents, and reaction with formaldehyde have failed to yield compounds of apparent value.

On December 8, 1948, at a joint meeting held with U.O.P. in Chicago it was disclosed that some success had been attained in preparing copolymers of isobutylene and butadiene. One of these polymers has been examined. It air dries in about six hours to a tack free film which becomes brittle in a few days. The films tend to wrinkle badly unless they are very thin and have almost no film strength. Films with and without pigmentation baked at 300° and 450° F. are very hard but lack adhesion and flexibility. Clear, air dried films of the polymer fail in less than 70 hours in the weatherometer - corresponding to two to three months of outdoor exposure.

Future work will depend on the ability of U.O.P. to produce oils which are superior to those already submitted. Samples of a duPont synthetic oil have been promised and will be examined. This oil is reported to resemble the natural oils more closely than the petroleum oils do. In addition, a routine study will be made of other new products as they are offered by the industry.

Depending on the results of new samples from U.O.P. and duPont, our expenses should not be greater than \$2,000.

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