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Gross Reference

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Anti-skinning agents
93 Line

"INDEXED"

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Philadelphia Laboratory
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MEMORANDUM REPORT NO. M-72

NOT FOR CIRCULATION

ATTEMPT TO DECREASE SKINNING TENDENCY OF 93 LINE DULUX

At the request of the Refinish Sales Department under investigation W-1052, we conducted some tests in the Laboratory in an attempt to reduce the tendency for our 93 Line "DULUX" to skin in partially filled containers. There has been some criticism of 93 Line from the field that excessive skinning has been encountered when it is stored in partially filled containers, as may quite frequently be the method of storing enamel in a refinish shop.

In our experiments, we selected four representative colors from the 93 Line and added various amounts of creosole, chemical A.S.A., and acetaldehyde. The skinning test was conducted by allowing the enamels to sit at room temperature in both full and half full cans and both covered and uncovered cans.

The anti-skinning content of the enamels was increased to as high as twenty times the amounts in the standard formula and even at this high content skinning occurred in every case in from five to eight days. Even though this is a decided improvement over the standard enamel, it is not nearly good enough to satisfy the demands of the consumer in the field. The improvement in anti-skinning obtained by increasing the inhibitor content to twenty times the standard amount resulted in a definite slowing of drying time to the tack-free stage by increasing the drying time from two to four hours depending on the enamel being tested. The slowing down of the drying time is probably more undesirable than the skinning tendency and we therefore feel that for all practical purposes the skinning of our 93 Line cannot be improved with the inhibitors we have available at this time.

These results were reported to the Refinish Sales Department and it was their feeling that nothing should be done to the formulas at this time, since the improvements in anti-skinning we obtained was not only not enough for their needs, but was obtained at the expense of drying time.

PHILADELPHIA LABORATORY

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