

Mr. J. E. Southwick

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PRODUCT DEVELOPMENT REPORT
LEAD REMOVAL

Recent laws that have been enacted require that we reduce the lead level to 0.5% maximum on the non-volatile. Special labeling will be required for all paints containing more than 0.5% lead.

In 1959, lead pigments were removed from Spred Gloss, Spred Lustre, Alkyd Flats and Florenamel to meet the requirements of 1% maximum lead content in the non-volatile. This was to meet the Baltimore and New York City labeling laws. The U.S. Department of Health, Education and Welfare now requires that we reduce this lead level to 0.5%.

To achieve this requirement, it was necessary to remove the lead drier. Two drier systems were studied; they are cobalt-zirconium and cobalt-Active 8. When running tests in Y-900 Spred Gloss, it was found that the cobalt Active 8 at equal dry times was excessive in costs and gave a slightly greenish-brownish color. The cost increase would be approximately 23¢ per gallon. At equal dry times the cobalt zirconium drier combination was the most acceptable and only increased the cost 3¢ per gallon. The levels of driers recommended for Y-900 are .07% cobalt metal, and .14% zirconium metal based on vehicle non-volatile. The Nuact paste (E-396) will be retained in the formulas to add dry stability on aging. The level will be dropped from 5 pounds to 4 pounds per 100 gallons. Similar changes will also be made in Y-800 line. The lead driers and Nuact paste will be maintained at the same levels in Spred Lustre Y-4600 line since the total amounts of lead are below 0.5%. No changes are contemplated in the Glid-Guard Industrial Enamel, Y-4500 line. Proper labeling will be maintained in the colors that contain lead pigments. These are primarily the yellow, orange, greens and reds.

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