



Hartford Accident and Indemnity Company

HOME OFFICE — HARTFORD 15, CONNECTICUT

August 21, 1951

Dr. Robert A. Kehoe
University of Cincinnati
Department of Preventive Medicine & Industrial Health
Cincinnati 19, Ohio

Dear Dr. Kehoe:-

We have recently learned that some lead organic compounds are being used as driers in the manufacture of paints, enamels, varnishes and synthetic paints, especially such compounds as lead naphthenate and lead phthalate. These driers are received from the manufacturer in concentrated form and are reduced by the paint manufacturer at a ratio of approximately 4 to 1. The reduced driers are then compounded in batch mixes of approximately 5 gallons per 1000 gallons.

Since it is necessary for the paint manufacturer to place the concentrated drying agent into the solution with either alcohol or a thinner, there is some handling of the dry concentrated material. We are not able to find anything in the literature on the solubility of the above two lead organic compounds in the gastro-intestinal tract.

Likewise, there is considerable handling of the reduced drying agent in the course of the various products compounding operations in open containers such as pails and buckets. This naturally raises the question of skin absorption of these two lead compounds and we are also unable to find anything in the literature concerning this toxicological aspect. Since such compounds as tetraethyl lead, lead acetate and lead oleate are readily absorbed through the skin, we are prone to question this characteristic of the two compounds in question.

Any information you can give us on the above matter will be greatly appreciated.

Thank you.

Yours very truly,

H. A. Thiemann, Engineer
Engineering Department

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