



CALIFORNIA METAL ENAMELING COMPANY

6904 EAST SLAUSON AVENUE • LOS ANGELES 22, CALIFORNIA • RAYMOND 3-6351

January 7, 1963

Dr. Robert A. Kehoe
Director of Kettering Laboratory
The University of Cincinnati
College of Medicine
Eden Avenue
Cincinnati 19, Ohio

Dear Dr. Kehoe:

We are writing to you in regard to a letter received from the Lead Industries Association, Inc., a copy of which is enclosed.

We are also enclosing copies of two new reports dated January 3, 1963 of tests performed by Truesdail Laboratories in accordance with the State of California test method for determining lead solubility of ceramic glazes for the pottery industry. The tests performed by Truesdail were on the alternate method proposed by the State of California and further tests on the boiling acetic acid are being performed presently and should be available within the next few days.

It is our understanding that the State of California allow up to four parts per million for these ceramic glazes. Since our porcelain aluminum materials seem to react favorably in this light, i.e., less than four parts per million, it was our feeling that the porcelain enamels could be used on the interior of cookware even though they are fired at 1,000 degrees Fahrenheit instead of the conventional firing temperature of the pottery industry. Our lead content is approximately 30% of the smelted formulation which is, in many cases, less than used by the pottery industry in their cookware.

As suggested by Mr. Fowler, possibly the Kettering Laboratory has a more definitive test for determining the maximum allowable lead solubility in a ceramic glaze that could be suggested to us for testing by the Truesdail Laboratories or another recognized independent laboratory. We would appreciate whatever help you could offer along this line, as well as your evaluation of the enclosed reports.

Very truly yours,

H. V. Penton
President

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Lead Industries Association, Inc.

292 MADISON AVENUE

NEW YORK 17, N.Y.

CHARLES R. INCE, PRESIDENT
CHARLES E. SCHWAB, VICE PRESIDENT
J. G. SMARE, JR., VICE PRESIDENT
WILLIAM P. WILKINSON, VICE PRESIDENT
ROBERT LINDLEY ZIEGLER
EXECUTIVE VICE PRESIDENT
SECRETARY-TREASURER

January 4, 1963

Mr. H. V. Penton, President
California Metal Enameling Company
6904 East Slauson Avenue
Los Angeles 22, California

Re: Your letter of December 11, 1962

Dear Mr. Penton:

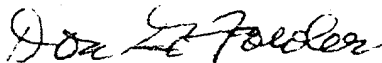
We are of the opinion now, as we have been in the past, that enamel on aluminum cookware should not be coated on the interior surface with lead-bearing enamels. Our recent series of tests run at the Kettering Laboratory lead us to believe that one of the most important factors in the reduction of lead release from glazes and enamels is the firing temperature. Thus far the Kettering tests indicate that those glazes fired below 1860°F. increase the risk of lead leaching.

We would recommend that you contact Dr. Robert A. Kehoe, Director of the Kettering Laboratory, The University of Cincinnati, College of Medicine, Eden Avenue, Cincinnati 19, Ohio, for his advice and help in suggesting and, possibly, performing suitable tests.

The main reason we make the suggestion that your company contact Dr. Kehoe is that there is no suitable standard for lead release in cookware or dinnerware at the present time in this country and we have been working with the Kettering Laboratory in an investigation designed to inquire into the development of a suitable standard. None of the standards that we have seen in foreign countries use the terminology or test methods which the Truesdail Laboratories used in the evaluation which they performed for your company. So that it is difficult to relate the results they obtained to the known foreign standards. If you wish, we will obtain copies of these foreign standards and make them available to you.

In summary then, we do not at the present time and in the light of our current knowledge recommend the production and use of enamel aluminum cookware which contains interior enamel surfaces.

Very truly yours,



Don G. Fowler

DGF:md

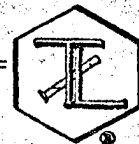


Look Ahead with Lead

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KE 0008353

REPORT
TRUESDAIL LABORATORIES, INC.



CHEMISTS - BACTERIOLOGISTS - ENGINEERS

4101 N. FIGUEROA STREET
LOS ANGELES 65
CAPITOL 5-4148

CLIENT California Metal Enameling Company
6904 East Slauson Avenue
Los Angeles 22, California
Attn: Mr. Hugh Penton

DATE January 3, 1963

RECEIVED December 26, 1962

SAMPLE Ceramic Coated Dish

LABORATORY NO. 59815

P.O. No. 21232

INVESTIGATION

Test according to tentative method of test for
solubility of lead from glaze surfaces.

RESULTS

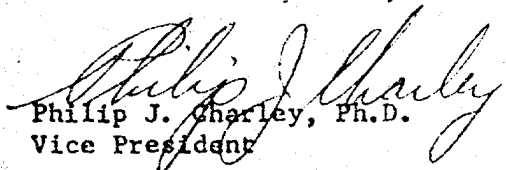
LEAD

Parts per million ----- 2.5

Milligrams per square inch of exposed surface - 0.020

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.


Philip J. Charley, Ph.D.
Vice President

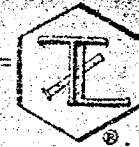
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KE 0008354

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from these Laboratories.

REPORT

TRUESDAIL LABORATORIES, INC.



CHEMISTS - BACTERIOLOGISTS - ENGINEERS

4101 N. FIGUEROA STREET
LOS ANGELES 65
CAPITOL 5-4148

CLIENT California Metal Enameling Company
6904 East Slauson Avenue
Los Angeles 22, California
Attn: Mr. Hugh Penton

DATE January 3, 1963

RECEIVED December 26, 1962

SAMPLE Ceramic Coated Dish

LABORATORY NO. 59816

P.O. No. 59816

INVESTIGATION

Determination of the amount of lead, cadmium, and antimony in 5% acetic acid solution which had been in contact with the ceramic coated dish for twenty-four hours at room temperature.

RESULTS

	<u>Parts per million</u>	<u>Milligrams per square inch of exposed surfaces.</u>
Lead	1.9	0.013
Cadmium	None detected	-----
Antimony	Less than 0.05	Less than 0.0005

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Philip J. Charley
Philip J. Charley, Ph.D.
Vice President

KE 0008355

N9691.03

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