

LEAD INDUSTRIES ASSOCIATION

Graybar Building, 420 Lexington Avenue
New York, N. Y.

July 24, 1933

To Members of the Lead Industries Association
Manufacturing Lead Oxides:

Subject: Discussion on the Use of Lead in Enamelled
Ware.

Please note copy of a letter kindly furnished us
by Mr. S. B. Coolidge, Jr., of Sherwin Williams Company,
outlining some of the views of Professor Paulbut S.
Jacoby, of the Ohio State University Research Foundation,
on the litharge problem in the manufacture of ceramic ware.

Also please note a suggestion from Mr. E. L. Edlett,
following up our memorandum of July 18.

Very truly yours,

J. A. Brown
Secretary.



C O P Y

THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION
COLUMBUS, OHIOEugene S. Jacoby
Research Director

July 15, 1938.

Professor E. E. Ware,
Sherwin-Williams Company,
101 Prospect Avenue, N.W.,
Cleveland, Ohio.

Dear Professor Ware:

In a recent talk with Dr. George A. Bole, head of our Ceramic research, he seemed quite confident that we can accomplish the result which the lead people require and as expressed in your letter of July 14. Separately I am sending you a copy of Dr. J.M. Koenig's bulletin entitled "Lead Frits and Fritted Glasses" which covers investigations closely related to this subject and as developed in cooperation with the United States Pottery Association. Dr. Koenig feels that "fusible lead compounds or frits for use in ceramic glasses can be prepared and used for introducing the lead content into the glass. The lead dust hazard in the plant is greatly reduced by the substitution of a more acid-resistant lead frit, increasingly as the solubility of the lead frit in the gastric juices is reduced. Attempts have frequently been made in the ceramic field to produce a leadless glass but work so far has proven the desirability and even the necessity of lead in the glasses generally in use for brilliant, fool-proof glasses. The solubility in dilute acid of various lead frit compositions were related to composition in the enclosed bulletin. The practical application of these insoluble lead frits has been demonstrated by commercial use in a number of potteries."

With the background of actual accomplishment in this field, Dr. Bole and I feel that we are in a good position to carry on a research project to advantage and actually obtain the results desired. Dr. Koenig himself might not be in a position to act as the investigator but I am sure that Dr. Bole can make the necessary arrangements and that we can set up a project a great deal along the lines of the existing cooperation with your company. Dr. Koenig tells me that one or two of the lead companies have approached us regarding work somewhat similar to this in nature, but no definite action has been taken.

If you will advise me, I will be glad to follow your suggestion in an aggressive effort to get the work under way if the lead industries are interested.

Very truly yours,

EUGENE S. JACOBY

Research Director

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C O P Y

NATIONAL LEAD COMPANY
Research Laboratories
106 York Street,
Brooklyn, N. Y.

July 20, 1938.

Mr. F. E. Wormser, Secretary,
Lead Industries Association,
430 Lexington Avenue,
New York, N.Y.

Dear Mr. Wormser:

I have your letter of July 18 to the lead oxide producers and one further thought occurs to me in this connection.

Mr. Coolidge expressed the opinion that Sherwin-Williams would not be interested in making lead silicate and perhaps the large companies who make the frit and sell it to the small enamlers could be induced to make lead silicate, make a frit of the other glass ingredients and mechanically mix them instead of making a single frit. The expense to the frit manufacturers might not be much, if any, greater than making their present frit in one operation and this might remove the health hazard from the factories of the small enamlers and at the same time permit the lead manufacturers to continue to supply lead in the form of litharge.

I do not know whether we could sell the large frit manufacturers on a procedure of this kind, but I offer the thought for what it may be worth.

Yours very truly,

R. L. HALLITT (SIGNED)

Chief Chemist

cc: Messrs. K. Rowe
Stewart

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