

LEAD INDUSTRIES ASSOCIATION

480 LEXINGTON AVENUE

NEW YORK 17, N. Y.

RED LEAD DIVISION

CONFIDENTIAL
SUBJECT TO REVISION

RED LEAD TECHNICAL COMMITTEE

New York, N.Y.

October 26, 1945

A meeting of the members of the Red Lead Technical Committee was held on October 26, 1945, in the offices of the Lead Industries Association. The following members were present:

Committee

A.C. Goets
 O.F. Shobe
 George Diehlman

Representing

Eagle Picher Co.
 Glidden Co.
 National Lead Co.

F.E. Wormser, Secretary of Lead Industries Association
 L.L. Carriak, Director of Red Lead Research
 J.L. Benson, Secretary of Meeting

The meeting opened at 10:00 A.M. with Dr. Carriak presiding.

REPORT OF BATTELLE MEMORIAL INSTITUTE

Dr. Carriak opened the meeting with a discussion of the preliminary report of the Battelle Memorial Institute on the welding test project. Dr. Carriak said that he had recently visited Battelle and had examined the bead weld samples, photographs of which appear in the report. Certain samples show evidence that the paint under test may have a restricting effect on the flow of the metal, indicated by a narrow relatively high bead in contrast to the wide flat oval section of the normal bead on an unpainted plate.

One of the paints (14-AC) which did not have the restricting effect has a resin base vehicle which may have a fluxing effect.

Additional tests made on plates coated with vehicle only showed no noticeable variation in bead shape which would indicate that the restricting factor is the pigment.

Mr. Diehlman suggested that since the report on these tests is in a preliminary stage it is not ready for release to anyone outside of the Red Lead Committee and moved that no action leading toward such a release be taken by any member or by Battelle Institute until more work has been done to determine whether or not modifications of pigmentations can be made which will reduce or eliminate the restricting effect on the spreading action of the welding bead and also eliminate porosity in the weld beads.



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Seconded by Mr. Coats.

Passed.

Mr. Wornser suggested that the committee meet at Battelle on November 18 to discuss this investigation. The Committee will plan to arrive at Columbus on the evening of November 18.

Dr. Carriek suggested that sample panels of additional paints be prepared by the committee and submitted for test in the presence of the committee.

Mr. Wornser phoned Mr. Voldrich and made arrangements for meeting on November 18 and Dr. Carriek arranged for suitable steel panels to be sent to Mr. Diehlman for the application of additional paints (2.0 and 10.0 mil thicknesses).

Mr. Shobe asked what paints should be used. The following were decided upon:

L.I.A. No. 88
L.I.A. No. 89
L.I.A. No. 118
L.I.A. No. 111

The painted panels will be shipped back to Battelle Institute in time for the committee to witness the weld bead tests on November 18.

Mr. Shobe suggested and it was generally agreed that tests in 10 mil thickness samples were of little practical value since such an accumulation of prime coats of paint would seldom be encountered except on old structures under repair in which case welding would probably be preceded by cleaning.

PAINTS TO BE APPLIED TO ZINC COATED STEEL PANELS PROJECT

Mr. Shobe reported that he has completed the preparation of all but two of the paints intended to be tested on zinc coated steel panels. Mr. Shobe will forward the paints to Mr. Diehlman together with a covering letter. In the meantime, Dr. Carriek will send paint numbers and formulas to committee members. Dr. Carriek will also endeavor to secure the two additional paints which Mr. Shobe has been unable to make.

NATIONAL PAINT VARNISH & LACQUER ASSOCIATION BULLETIN NO. 710

Mr. Wornser read his letter to Mr. Trigg, President of the National Paint Varnish and Lacquer Association in regard to Bulletin No. 710 of the Scientific Section and followed it with Mr. Triggs reply.

Mr. Trigg regrets that the Red Lead Manufacturers feel that red lead was disparaged in the report but proposes only that the Association will be willing to supply a complete mailing list to which the Red Lead Technical Committee may send what information they see fit.

Mr. Coats read correspondence between himself and Mr. George Schwartz of the National Paint Varnish & Lacquer Association which was no more satisfactory.

Mr. Wornser believes that the red lead manufacturers should be afforded an opportunity to present data on both performance and toxicity in the same publication preferably as bulletin No. 710A.

Mr. Shobe suggested that a report on the tests which have been conducted by the Red Lead Committee would be suitable for inclusion in such an article.

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Mr. Coets suggested that Mr. Wormser's draft on toxicity should be included.

Mr. Diehlman suggested that data on red lead paints which have performed satisfactorily in actual use be included.

It was agreed that Mr. Shobe, Mr. Diehlman and Dr. Carrick present rough drafts which together with Mr. Wormser's draft would be discussed and correlated in a meeting in Columbus on the evening of November 16.

APPOINTMENT OF NEW DIRECTOR FOR RED LEAD TECHNICAL COMMITTEE

Mr. Wormser presented a number of letters received in answer to the advertisement for a man to head the Red Lead Technical Committee. After some discussion it was decided to withhold action until possible additional applications had been received.

ADDITIONS TO "USEFUL INFORMATION ABOUT LEAD"

Mr. Ziegfeld was invited into the meeting for discussion of the suggested additions to the red lead sections of the new edition of "Useful Information About Lead."

Mr. Coets presented written suggestions including specifications for ready-mixed red lead and blue lead paints.

Mr. Diehlman suggested that the function of the book was to create interest and invite inquiry rather than to furnish set specifications.

Mr. Ziegfeld asked what formulations should be included in addition to those already given. The following paints were suggested:

TT-P-86 Amendment No. 1
L-I-A. No. 35
L-I-A. No. 111
L-I-A. No. 118
L-I-A. No. 108

Mr. Diehlman agreed to furnish Mr. Ziegfeld with the formulas of those paints.

FORMULATIONS FOR INCLUSION IN ATMOSPHERIC TEST PROGRAM

After tentative discussion of paints for use in this program it was suggested that additional study should be given to the objectives of the project in order that they might be more clearly defined.

It was decided that this matter could be further discussed at the meeting in Columbus with the object of adopting a series of test formulas which will lead the investigation in the desired direction.

Attached is a list of formulas under consideration to be further discussed at the Columbus meeting.

The meeting adjourned shortly before 7:00 P.M.

J. Leland Benson
J. Leland Benson,
Secretary of Meeting.

**SUGGESTED PIGMENTATIONS FOR PAINTS CONTAINING NO RED
LEAD OR RELATIVELY SMALL AMOUNTS OF RED LEAD TO BE
INCLUDED IN THE ATMOSPHERIC EXPOSURE TESTS OF MIXED
PIGMENT RED LEAD PAINTS**

VEHICLE

- A. Raw linseed oil or a combination of raw linseed oil and bodied oil (7-8%) and thinners.
- B. Raw linseed oil and alkyd vehicle (34% P.A. linseed oil type).
- C. 60% by volume of high oil content alkyd vehicle (as 82-MC-21) and 40% by volume phenolic resin (as 2963, 80 gal. linseed oil type - body C).
- D. A high oil content alkyd vehicle alone (as 82-MC-21 or IV3363).
- E. Freight car vehicle (information to be furnished by Mr. Shobe).

A PV of 35 is to be used for all paints in this list. Consistency approximately 70 K.U.

	1	2	3	4	5	6	7	8
Red Lead (85%)								
Red Lead (95%)						10%		
Red Lead (95%)								25%
Zinc Chromate	25%	35%	50%	25%	20%			20%
Zinc Oxide		15%		10%	10%		10%	15%
Iron Oxide	55%	55%	40%	30%	10%		25%	20%
Basic Lead Chromate							25%	
Blue Lead								
Black Iron Oxide					50%			
Graphite						10%		
Amorphous Silica							10%	
Asbestine	20%	15%	10%	15%		20%		20%
Magnesium Silica				20%	20%		20%	
Zinc Tetraoxy Chromate								
White Lead								
Potassium Barium Chromate								
Metaloid								

Drier: 0.5% lead, 0.02% manganese, 0.05% cobalt based on oil content.