

LEAD INDUSTRIES ASSOCIATION

420 LEXINGTON AVENUE

NEW YORK 17, N. Y.

December 8, 1955

SUBJECT: RED LEAD TECHNICAL
LETTER NO. 10

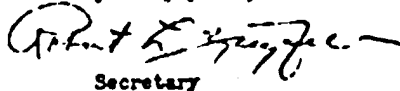
To Members of the Lead Industries Association:

Attached is a copy of Red Lead Technical Letter No. 10, "L.I.A. Formula 3-7, A Red Lead Alkyd Vehicle Primer for Industrial and Marine Environments," which contains a formula recently adopted as a standard primer by the Standard Oil Co. of California. Approximately 14,500 copies of this Technical Letter are being distributed to individuals in the following groups:

Paint Production Clubs
National Paint, Varnish and Lacquer Association
National Association of Corrosion Engineers
Water and Sewage Works
Railroads
Shipyards
Highway Engineers
Construction Companies
Municipal Engineers
Utility Companies
Miscellaneous

Additional copies of the Technical Letter are available for the use of members upon request.

Very truly yours,



Secretary



L. I. A. Formula 3-7

A RED LEAD

ALKYD VEHICLE PRIMER

for

INDUSTRIAL AND MARINE

ENVIRONMENTS

	PAGE
FOREWORD	2
MANUFACTURERS OF RED LEAD	2
RED LEAD-ALKYD VEHICLE PRIMER FOR INDUSTRIAL AND MARINE ENVIRONMENTS	3

Red Lead Technical Committee
LEAD INDUSTRIES ASSOCIATION
420 LEXINGTON AVENUE
NEW YORK 17, N. Y.

Foreword

RED Lead-Alkyd Vehicle Primer Formula 3-7, described in this Technical Letter is suggested to industrial users as a primer for paint systems to protect steel surfaces exposed in chemically contaminated atmospheres and marine environments such as storage tanks, ship superstructures, bridges and dock installations.

Formula 3-7 has been thoroughly test evaluated and is in commercial use. It has also been adopted as a standard primer by a major oil company.

This formula appeared some time ago in Red Lead Technical Letter No. 3 simply as a marine paint primer suggestion with which the Red Lead Technical Committee had excellent test results. Its wider adaptability and practical commercial use warrant its being pointed out specifically to industrial users and paint manufacturers.

As with other fast drying primers, application on steel free of rust, grease and other foreign matter is essential for best performance.

Inquiries on this formulation or on specific painting problems are welcome and should be addressed to the Lead Industries Association or to the designated individuals in the cooperating companies listed below.

THE EAGLE-PICHER COMPANY American Building, Cincinnati 1, Ohio

For technical information write Paul Whitford at above address.

Chicago, Cleveland, Dallas 26, Detroit, Kansas City 8, (Mo.), New Orleans, New York 17, Philadelphia 4, Pittsburgh 22. On the Pacific Coast: Associated Lead and Zinc Company, Seattle 4, Los Angeles 21, San Francisco 7.

W. P. FULLER & COMPANY 301 Mission Street, San Francisco 19, California

For technical information write W. J. Holtrich at above address.

Boise, Butte, Fresno, Los Angeles, Oakland, Phoenix, Portland (Ore.), Sacramento, Salt Lake City, San Diego, Seattle, Spokane, Tacoma, Yakima (Wash.)

THE GLIDDEN COMPANY 1296 Union Commerce Building, Cleveland 14, Ohio

For technical information write G. F. Shobe at above address.

Atlanta, Boston, Minneapolis, New York, South Hackensack (N. J.), San Francisco; Adams & Elting Division, Chicago; American Paint Works Division, New Orleans; Campbell Paint & Varnish Division, St. Louis; Nubias Paint & Varnish Division, Chicago; A. Wilhelm Company Division, Reading; Canadian Division, Toronto; Chemicals, Pigments & Metals Division, Baltimore, Collinsville (Ill.), Hammond, (Ind.); Easton Lead Company, Scranton.

HAMMOND LEAD PRODUCTS, INC. 8231 Hohman Avenue, Hammond, Indiana
420 Lexington Avenue, New York 17, N. Y.
1402 Oliver Building, Pittsburgh 22, Pa.

For technical information write J. G. Johnston at Hammond, Indiana.

NATIONAL LEAD COMPANY 111 Broadway, New York 6, N. Y.

For technical information write George Dickman at above address.

Atlanta, Buffalo 3, Chicago 8, Cincinnati 2, Cleveland 12, Dallas 2, Philadelphia 25, Pittsburgh 12, St. Louis 1, San Francisco 10, National Lead Company of Mass., Boston 8.

WESTERN LEAD PRODUCTS COMPANY 4536 J. Pacific Way, Los Angeles 22, California
1238 Fourth Street, Berkeley 2, California

For technical information write Thomas B. Mohr at Los Angeles, California.

L. I. A. Formula 3-7

A RED LEAD-ALKYD VEHICLE PRIMER

FOR

INDUSTRIAL AND MARINE

ENVIRONMENTS

FORMULA 3-7

<u>Composition</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Gallons</u>
PIGMENT: Red Lead (97% Grade)	55.0	518	7.0
Zinc Yellow	10.0	94	8.3
Zinc Oxide	10.0	94	2.0
Iron Oxide (85% Fe ₂ O ₃)	7.0	65.8	1.9
Magnesium Silicate	10.0	94	4.0
Diatomaceous Silica	8.0	75.8	8.9
	100.0		
VEHICLE: L.I.A. Vehicle No. 27	74.9	436	54.5
Mineral Spirits	23.7	138	23.5
Driers	1.4	8	0.9
	100.0	1383.1	100.0

Pigment = 61.8%
 Vehicle = 38.2%
 Wt./Gal. = 15.83 lbs.
 PV = 40

Dry for handling - 1 hour
 Dry for recoating - 24 hours
 Viscosity - 90-95 Krebs Units
 Reduction for spray - 4 parts of primer to 1 part of
 V M & F Naphtha
 Reduction for brush - 8 parts of primer to 1 part of
 aromatic hydrocarbon of boiling
 range 350-375° F. and approx-
 imately 60% aromatic

*L.I.A. Vehicle No. 27	
Dehydrated Castor Oil Fatty Acids	51.8%
Chrysotol	15.0
Phthalic Anhydride	18.0
Mineral Spirits	95.0
	100.0%

Cooking Procedure: Heat the first three items to 350°F. for 40 minutes with good agita-
 tion and under carbon dioxide gas, preferably in a closed bottle.
 Slowly increase the temperature to 475°F. and hold for approx-
 imately 100 minutes. Cool and reheat.

Proportions: Resin Vehicle - 80% by weight
 Viscosity - 2 (Candou-Mohr)
 Acid Number - 3-10 (on vehicle)
 Phthalic Anhydride - 20% (on vehicle)

NOTE: A vehicle of characteristics similar to those of L.I.A. Vehicle No. 27 may be made
 starting with Anhydron as raw material and with appropriate changes in raw
 material quantities and cooking procedure. The vehicle is also available from
 several manufacturers including Household Chemicals, Inc. (or P-663 Borden)
 and Archer-Daniels-Midland Co., and is closely approximated by Ruben & Ross
 Co. Durgan C-88.

Information note: The vehicle portion of this formula, as printed
 in Red Lead Technical Letter No. 8, is in error.