

L. I. A. Formula 3-7

A RED LEAD

ALKYD VEHICLE PRIMER

for

INDUSTRIAL AND MARINE

ENVIRONMENTS

	PAGE
FOREWORD.	2
MANUFACTURE OF RED LEAD.	2
RED LEAD-ALKYD VEHICLE PRIMER FOR INDUSTRIAL AND MARINE ENVIRONMENTS	8

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

Foreword

RED Lead-Alkyd Vehicle Primer Formula 8-7, 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 8-7 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. 8 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-PRIMER 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. Ruffick at above address.

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

THE GLENN 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 & Ewing Division, Chicago; American Paint Works Division, New Orleans; Campbell Paint & Varnish Division, St. Louis; Nubian Paint & Varnish Division, Chicago; A. Wilhelm Company Division, Reading; Canadian Division, Toronto; Chemicals, Pigments & Metals Division, Baltimore, Coltonville (Ill.), Hammond, (Ind.); Easton Lead Company, Scranton.

HAMMOND LEAD PRODUCTS, INC..... 5231 Hohman Avenue, Hammond, Indiana

420 Lexington Avenue, New York 17, N. Y.
1603 Oliver Building, Pittsburgh 22, Pa.

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

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

For technical information write George Stokman at above address.

Atlanta, Buffalo 8, Chicago 8, Cincinnati 8, Cleveland 18, Dallas 8, Philadelphia 23, Pittsburgh 12, St. Louis 1, San Francisco 10, National Lead Company of Mass., Boston 6.

WESTERN LEAD PRODUCTS COMPANY... 4430 E. Pacific Way, Los Angeles 22, California

1258 Fourth Street, Berkeley 2, California

For technical information write Thomas E. Shale at Los Angeles, California.

L. I. A. Formula 3-7

A RED LEAD-ALKYD VEHICLE PRIMER

FOR

INDUSTRIAL AND MARINE

ENVIRONMENTS

FORMULA 3-7

Composition	Pigment	Vehicle	Other
Pigment: Red Lead (97% Grade)	35.0	51.0	7.0
Zinc Yellow	10.0	94	2.0
Zinc Oxide	10.0	94	2.0
Iron Oxide (85% Fe ₂ O ₃)	7.0	95.0	1.0
Magnesium Silicate	10.0	94	2.0
Distearylacetic Ester	0.0	75.0	2.0
	100.0		
VEHICLE: L.I.A. Vehicle No. 27	74.0	400	54.0
Mineral Spirits	22.7	125	22.5
Diluent	1.4	8	0.9
	100.0	1000.1	100.0

Pigment = 61.0%
 Vehicle = 28.0%
 Wt./Vol. = 11.50 lbs.
 PV = 40

- Dry for handling - 1 hour
- Dry for recoating - 24 hours
- Viscosity - 80-90 Kuhn Units
- Reduction for spray - 4 parts of primer to 1 part of V M & P Naptha
- Reduction for brush - 8 parts of primer to 1 part of aromatic hydrocarbon of boiling range 320-375° F. and approximately 60% aromatic

L.I.A. Vehicle No. 27	
Dibutyltin Diolate-Carboxylic Acid	61.0%
Chromate	10.0
Phthalic Anhydride	10.0
Mineral Spirits	22.0
	100.0%

Coating Procedure: Heat the first three items to 100°F. for 15 minutes with good agitation and under vacuum (should gas, preferably in a closed bath). Slowly increase the temperature to 175°F. and hold for approximately 120 minutes. Cool and reduce.

Properties: Non Volatile - 60% by weight
 Viscosity - 80 (Goodman-Gold)
 Acid Number - 40-50 (as solids)
 Phthalic Anhydride - 10% (as solids)

NOTE: A vehicle of characteristics similar to those of L.I.A. Vehicle No. 27 may be made starting with dibutyltin diolate as raw material and with appropriate changes in raw materials, quantities and cooking procedure. The vehicle is also available from several manufacturers including Goodrich Chemicals, Inc. (a F-44 product) and American Cyanamid Chemical Co., and is closely approximated by Rahn & Hany Co. (Orange, N.J.).

Information note: The vehicle portion of this formula, as printed in Red Lead Technical Letter No. 2, is in error.