

LEAD INDUSTRIES ASSOCIATION

435 LEONISTON AVENUE
NEW YORK 17, N. Y.

Pigments and Chemicals Division

May 7, 1954

Subject: Red Lead Technical
Letter No. 9

To Members of the Red Lead Technical Committee;

Attached is a first draft of Red Lead Technical Letter No. 9, RED
LEAD PAINTS FOR RUSTED, WEATHERED OR TREATED NEW GALVANIZED STEEL.

I would appreciate any comments, corrections or suggestions you
may have to offer, so that they may be incorporated in a working draft
to be finalized by the committee at its next meeting, tentatively set
for June 14.

Very truly yours,

Charles E. Cherry Jr.
Secretary to the Committee



SEPTEMBER, 1954

Red Lead Technical Letter No. 9

RED LEAD PAINTS
for
RUSTED, WEATHERED or TREATED NEW
GALVANIZED STEEL

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Red Lead Technical Committee

LEAD INDUSTRIES ASSOCIATION
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FOREWORD

The problems created by the general practice of leaving galvanized steel unprotected until corrosion has actually commenced creates a demand for a very special paint when one finally is applied. The formulations contained in this Technical Letter were developed by the Red Lead Technical Committee to meet specifically the requirements for the protective coating of rusted or weathered galvanized steel or new galvanized steel that has been treated.

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

Red Lead Manufacturers

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**RED LEAD PAINT FORMULATIONS
FOR RUSTED, WEATHERED, OR TREATED NEW,
GALVANIZED STEEL**

For One Coat Application

The three formulations below are recommended for use where no further coating is to be applied. The third formulation is included for use where a green tint is preferable to the red tint of the first two formulations.

Formula 2-1

<u>Composition</u>	<u>Percent</u>	<u>Pounds</u>	<u>Gallons</u>
PIGMENT: Red Lead, 97% Grade.....	30.0	591.0	7.9
Iron Oxide, 85% Fe ₂ O ₃	15.0	295.0	7.9
Aluminum Stearate.....	0.5	9.8	1.2
Zinc Dust*.....	54.5	1070.0	18.2
	<u>100.0</u>		
VEHICLE: Raw Linseed Oil.....	49.0	241.0	31.1
Glyptal 2466.....	34.2	168.0	21.2
Mineral Spirits.....	15.5	76.1	11.7
Lead Naphthenate (24%).....	0.9	4.4	0.5
Cobalt Octoate (6%).....	0.4	2.0	0.3
	<u>100.0</u>	<u>2457.3</u>	<u>200.0</u>

Pigment = 80%
Vehicle = 20%
Wt./Gal. = 17 lbs. (without zinc dust)
PV = 42

*Zinc dust is to be packaged separately and mixed with paint at time of use.

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Formula 9-2

Composition	Percent	Pounds	Gallons
PIGMENT: Red Lead, 97% Grade.....	30.0	387.0	5.3
Iron Oxide, 85% Fe ₂ O ₃	15.0	191.0	5.3
Aluminum Stearate.....	0.5	6.5	0.8
Zinc Dust*.....	54.5	705.0	18.0
	100.0		
VEHICLE: Glyptal 2466.....	65.0	367.0	46.4
Mineral Spirits.....	34.2	191.0	29.7
Lead Naphthenate (24%).....	0.57	3.3	0.3
Cobalt Octoate (6%).....	0.23	1.3	0.2
	100.0	1856.1	100.0

Pigment = 69.6%
 Vehicle = 30.4%
 Wt./Gal. = 13.1 lbs. (without zinc dust)
 PV = 42

*Zinc dust is to be packaged separately and mixed with paint at time of use.

Formula 9-3

For use where a green tint is desired.

Composition	Percent	Pounds	Gallons
PIGMENT: Red Lead, 97% Grade.....	40.0	712.0	9.6
Chromium Oxide.....	19.5	348.0	8.3
Aluminum Stearate.....	0.5	9.0	1.1
Zinc Dust*.....	40.0	712.0	12.1
	100.0		
VEHICLE: Raw Linseed Oil.....	47.8	219.0	32.1
Glyptal 2466.....	34.2	178.0	22.6
Mineral Spirits.....	17.2	89.5	13.7
Lead Naphthenate (24%).....	0.58	3.2	.3
Cobalt Octoate (6%).....	0.22	1.2	.2
	100.0	238.9	100.0

Pigment = 77.4%
 Vehicle = 22.6%
 Wt./Gal. = 18 lbs. (without zinc dust)
 PV = 40

*Zinc dust is to be packaged separately and mixed with paint at time of use.

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For Application Where a Top Coat
Is to be Used

The following two formulations are designed as primers where a top coat is to be applied.

Formula 9-4

<u>Composition</u>	<u>Percent</u>	<u>Pounds</u>	<u>Gallons</u>
PIGMENT: Red Lead, 97% Grade.....	50.0	1007.0	13.6
Aluminum Stearate.....	0.5	9.9	1.2
Zinc Dust*.....	49.5	997.0	17.0
	100.0		
VEHICLE: Raw Linseed Oil.....	46.5	238.0	30.7
Glyptal 2466.....	32.75	160.0	21.2
Mineral Spirits.....	19.5	101.0	15.5
Lead Naphthenate (24S).....	0.67	4.5	.5
Cobalt Octoate (6%).....	0.58	2.0	.3
	100.0	2527.4	100.0

Pigment = 79.7%

Vehicle = 20.3%

Wt./Gal. = 18.4 lbs. (without zinc dust)

PV = 42

*Zinc dust is to be packaged separately and mixed with paint at time of use.

Formula 9-5

<u>Composition</u>	<u>Percent</u>	<u>Pounds</u>	<u>Gallons</u>
PIGMENT: Red Lead, 97% Grade.....	50.0	719.0	9.7
Aluminum Stearate.....	0.5	7.0	0.8
Zinc Dust*.....	49.5	712.0	12.1
	100.0		
VEHICLE: Glyptal 2466.....	67.7	308.0	49.2
Mineral Spirits.....	31.42	180.0	27.6
Lead Naphthenate (24S).....	0.63	3.6	.4
Cobalt Octoate (6%).....	0.25	1.4	.2
	100.0	2011.0	100.0

Pigment = 71.5%

Vehicle = 28.5%

Wt./Gal. = 14.8 lbs. (without zinc dust)

PV = 42

*Zinc dust is to be packaged separately and mixed with paint at time of use.

Although the formulations contained in this Technical Letter have been established by our Red Lead Technical Committee through careful evaluation, no guarantee of results is made or implied. Users are urged to make additional confirmatory evaluations to meet their specific requirements.

The Lead Industries Association and its member companies will be glad to give further information on metal protective paints or to assist on other paint problems.