

LEAD INDUSTRIES ASSOCIATION

480 LEXINGTON AVENUE

NEW YORK 17, N. Y.

L.I.A. NO. P-1
EXTERIOR PRIMER

	Pounds Non-Vol.	Total Pounds	Gallon	
Basic Carbonate White Lead.....		267.2	4.7	
White Basic Lead Sulfate.....		267.2	5.1	
Rutile Non-Chalking Titanium Dioxide...		105.8	3.1	
Barytes.....		214.4	6.6	
Magnesium Silicate.....		173.4	7.3	
Litharge.....		10.6	0.1	
Raw Linseed Oil.....	159.8	159.8	20.7	
Bodied Linseed Oil (2-4).....	143.3	143.3	17.7	
Ester Gum Cold Cut (10 lb.).....	22.0	36.4	4.6	2.4 MW
Cobalt Naphthenate (6%).....		2.5	0.3	
Mineral Spirits		208.2	31.8	
		1612.8	102.0	

Pigment = 66.0%

Vehicle = 34.0%

P.V.C. = 39.7

Fig./Gal. Paint = 10.5 lbs.

Consistency = 86% ± K.U.

Pigment Analysis

Basic Carbonate White Lead	25.0%
White Basic Lead Sulfate	25.0%
Rutile Non-Chalking Titanium Dioxide	9.9%
Barytes	22.9%
Magnesium Silicate	16.2%
Litharge	1.0%
	100.0

Vehicle Analysis

Vegetable Oil	55.2%
Resins	4.0%
Thinner & Drier	40.9%
	100.0

silicate type permitted.

about 10% silica may be used to replace barytes and/or magnesium
silicate to control gloss.The 10.6 lbs. litharge may be replaced by 40.8 lbs. (4.3 gals.) of
Lead Naphthenate (2%) and compensation made by adjusting the
mineral spirits content.

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L.I.A. NO. P-2
EXTERIOR PRIMER

	Pounds Non-Vol.	Total Pounds	Gallon	
White Lead.....		363.8	6.7	
Rutile Non-Chalking Titanium Dioxide...		106.4	3.1	
Magnesium Silicate.....		409.4	17.1	
Litharge.....		8.9	0.1	
Raw Linseed Oil.....	159.7	159.7	20.5	
Ester Gum Cold Cut (10 lb.).....	22.0	36.4	4.5	2.4KW
Low Acid Heat Bodied Linseed Oil - 22 - 24)....	143.1	143.1	17.6	
Cobalt Naphthenate (6%).....		2.8	0.4	
Mineral Spirits.....		208.6	32.0	
		1439.1	102.0	

Pigment = 61.7%

Vehicle = 38.3%

P.V.C. = 40.0

Pig./Gal. Paint = 8.7 lbs.

Consistency = 76 $\frac{1}{2}$ L.S.Pigment AnalysisVehicle Analysis

White Lead	40.9%	Vegetable Oil	55.0%
Rutile Non-Chalking Titanium Dioxide.....	12.0%	Resins	4.0%
Magnesium Silicate	46.1%	Thinner & Drier	41.0%
Litharge	1.0%		

41.0% silica may be used to cut the gloss if desired.
 or The 8.9 lbs. of litharge may be replaced by 34.4 lbs. (3.6 gals.)
 of lead naphthenate (24%) and compensation made by
 adjusting the mineral spirits content.



LEAD INDUSTRIES ASSOCIATION

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NEW YORK 17, N. Y.

L.I.A. NO. P-3 EXTENSION PRIMER

	Pounds Non-Vol.	Total Pounds	P-3 Gallons
White Lead		553.7	9.8
Rutile Non-Chalking Titanium Dioxide..		74.6	2.1
Magnesium Silicate.....		292.1	12.3
Litharge.....		9.2	0.1
Raw Linseed Oil.....	165.0	165.0	21.3
Ester Gum Cold Cut (10 lb.).....	22.7	37.6	4.7
Low Acid Heat Bodied Linseed Oil (22 - 24).....	147.8	147.8	18.2
Cobalt Naphthenate (6%).....		2.8	0.4
Mineral Spirits.....		215.5	13.1
		1598.3	102.0

Pigment = 62.0%

Vehicle = 38.0%

P.V.C. = 36.7

Pig./Gal. Paint = 9.1 lbs.

Consistency = 80 $\frac{1}{2}$ K.V.Pigment Analysis

White Lead	59.6%
Rutile Non-Chalking Titanium Dioxide	8.0%
Magnesium Silicate	31.4%
Litharge	1.0%
	100.0%

Vehicle Analysis

Vegetable Oil	55.0%
Resins	4.0%
Thinner & Drier	41.0%
	100.0%

510% Silica May be used to cut gloss if desired.
 or The 9.2 lbs. Litharge may be replaced by 35.4 lbs. (3.7 gals.)
 of Lead Naphthenate (24%) and compensation made by adjusting
 the mineral spirits content.



LEAD INDUSTRIES ASSOCIATION

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NEW YORK 17, N. Y.

L.I.A. NO. P-4
EXTERIOR PRIMER

	Pounds Non-Vol.	Total Pounds	Gallon
White Lead.....		472.8	8.7
Rutile Non-Chalking Titanium Dioxide.....		147.7	4.2
Magnesium Silicate.....		344.7	14.5
Litharge.....		9.8	0.1
Raw Linseed Oil.....	187.0	187.0	24.1
VN 1767 eee.....	80.0	112.7	14.8
VN 1693 eee.....	34.1	58.0	7.5
Blown Linseed Oil (Z-2).....	26.8	26.8	3.3
Cobalt Naphthenate (6%).....		2.8	0.4
Mineral Spirits.....		159.5	24.4
		1571.8	102.0

Pigment 8 64.1%

Vehicle = 35.9%

P.V.C. = 39.4

Fig./Gal. Paint = 9.6 lbs.

Consistency = 96 g 2 K.U.

Pigment AnalysisVehicle Analysis

White Lead	48.5%	Vegetable Oil	52.6%
Rutile Non-Chalking Titanium Dioxide	15.1%	Resins	7.4%
Magnesium Silicate	35.4%	Thinner & Drier	40.0%
Litharge	1.0%		
	100.0%		

510% Silicon may be used to cut gloss, if desired.

eeeThe 9.8 lbs. of litharge may be replaced by 37.9 lbs. (3.9 gals.)
of lead naphthenate (24%) and compensation may be made by
adjusting the mineral spirits content.

eee(4) Dehydrated Castor Oil, (4) Linseed Oil, (6) Varnish having
V to W viscosity (Gardner-Holdt) at 71.5% non-volatile.

eeeee5 gallon length ester gum - dehydrated castor oil varnish, 8 to 8
viscosity (Gardner - Holdt) at 58.8% non-volatile.



LEAD INDUSTRIES ASSOCIATION

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NEW YORK 17, N. Y.

L.I.A. NO. P-5
EXTERIOR PRIMER

	Pounds Non-Vol.	Total Pounds	Gallon
White Lead		367.6	6.5
Rutile Non-Chalking			
Calcium Titanium.....		285.8	10.5
Magnesium Silicate.....		245.3	10.3
Litharge.....		9.0	0.1
Raw Linseed Oil.....	187.2	187.2	24.1
VM 1767	80.1	112.8	14.8
VM 1693	34.2	58.1	7.5
Blown Linseed Oil (V-2).....	26.8	26.8	3.3
Cobalt Naphthenate (6%).....		2.7	0.4
Mineral Spirits		159.8	24.5

1455.1 102.0

Pigment = 62.4%

Vehicle = 37.6%

P.V.C. = 39.5

Pig./Gal. Paint = 8.9 lbs.

Consistency = 90 $\pm$ 2 K.U.Pigment Analysis

White Lead	40.5%
Rutile Non-Chalking	
Calcium Titanium	31.5%
Magnesium Silicate	27.0%
Litharge	1.0%
	100.0%

Vehicle Analysis

Vegetable Oil	52.6%
Resins	7.4%
Thinner & Drier	40.0%
	100.0%

210% SILICA may be used to cut gloss if desired.

eeThe 9.0 lbs. of litharge may be replaced by 34.8 lbs. (3.6 gals.)
of lead naphthenate (24%) and compensation may be made by
adjusting the mineral spirits content.

ee(h) Dehydrated Castor Oil, (4) Linseed Oil, (6) Varnish having
V to W viscosity (Gardner - Holdt) at 71.9% non-volatile.
ee=5 gallon length ester gum - dehydrated castor oil varnish, B to
C viscosity (Gardner-Holdt) at 58.8% non-volatile.



L.I.A. NO. 5-1
HOUSE PAINT

	Pounds Non-Vol.	Total Pounds	Gallon
White Lead.....		210.0	3.8
Zinc Oxide.....		295.0	6.1
Anatase Free-Chalking Titanium Dioxide.....		140.0	4.1
Magnesium Silicate.....		300.0	12.6
Raw or Refined Linseed Oil.....	290.0	290.0	37.5
Bodied Linseed Oil (2-2 to 2-3)...	124.0	124.0	15.5
Lead Naphthenate (24%).....		6.1	0.6
Manganese Naphthenate (6%).....		0.9	0.1
Mineral Spirits.....		<u>156.9</u>	<u>21.1</u>
		1502.9	102.0

Pigment = 62.9%

Vehicle = 37.1%

P.V.C. = 33.8

Pig./Gal. Paint = 9.5 lbs.

Consistency

Pigment Analysis

White Lead	22.2%
Zinc Oxide	31.2%
Anatase Free-Chalking Titanium Dioxide	14.8%
Magnesium Silicate	<u>31.8%</u>
	100.0%

Vehicle Analysis

Raw or Refined Linseed Oil.....	52.0%
Bodied Linseed Oil (2-2 to 2-3).....	22.2%
Thinner and Drier	<u>25.8%</u>
	100.0%

o/the free-chalking anatase titanium dioxide may be replaced in whole or in part by semi-non-chalking anatase to reduce chalking and erosion with some increase in dirt collection.

o/the consistency of this paint will vary depending upon the raw materials used. The oil content may be altered slightly to improve working properties.

L.I.A. NO. M-15
HOUSE PAINT-TINT BASE

	Pounds Non-Vol.	Total Pounds	Gallons
White Lead		210.0	3.9
Zinc Oxide		295.0	5.1
Rutile Non-Chalking Titanium Dioxide		112.0	3.2
Magnesium Silicate		326.0	13.7
Raw Linseed Oil	290.0	290.0	37.5
Bodied Linseed Oil (2-2 to 2-3)...	124.0	124.0	15.5
Lead Naphthenate (24%)		6.1	0.6
Manganese Naphthenate (6%)		0.9	0.1
Mineral Spirits		136.9	21.1
		1500.9	102.0

Pigment = 62.7%

Vehicle = 37.3%

P.V.C. = 33.8

Pig./Gal. Paint = 9.4 lbs.

Consistency

Pigment Analysis

White Lead	22.2%
Zinc Oxide	31.2%
Rutile Non-Chalking Titanium Dioxide	11.9%
Magnesium Silicate	34.7%
	100.0%

Vehicle Analysis

Raw Linseed Oil	52.0%
Bodied Linseed Oil (2-2 to 2-3)	22.2%
Thinner and Drier	25.8%
	100.0%

The consistency of this paint will vary depending upon the raw materials used. The oil content may be altered slightly to improve working properties.

LIA: NO. 15-2
HOUSE PAINT

	Pounds Non-Vol.	Total Pounds	Oil lbs
White Lead		243.0	4.5
Zinc Oxide		302.0	6.5
Anatase Free-Chalking Titanium Dioxide		130.0	4.0
Magnesium Silicate		300.0	12.6
Raw or Refined Linseed Oil	320.0	320.0	41.4
Bodied Linseed Oil (Z-2 to Z-3) ..	105.0	105.0	13.1
Lead Naphthenate (2%)		6.9	0.7
Manganese Naphthenate (6%)		1.2	0.2
Mineral Spirits		124.0	19.0
		1532.1	102.0

Pigment = 63.5%

Vehicle = 36.5%

P.V.C. = 33.8

Pig./Gal. Paint = 15.0 lbs.

Consistency

Pigment Analysis

White Lead	24.9%
Zinc Oxide	31.0%
Anatase Free-Chalking Titanium Dioxide	13.3%
Magnesium Silicate	30.8%

100.0%

Vehicle Analysis

Raw or Refined Linseed Oil ..	57.4%
Bodied Linseed Oil (Z-2 to Z-3)	18.8%
Thinner and Drier	23.8%

100.0%

•The free-chalking anatase titanium dioxide may be replaced in whole or in part by semi-non-chalking anatase to reduce chalking and erosion with some increase in dirt collection.
•The consistency of this paint will vary depending upon the raw materials used. The oil content may be altered slightly to improve working properties.

L.I.A. NO. 10-27
HOUSE PAINT - TINT BASE

	Pounds Non-Vol.	Total Pounds	Gallons
White Lead		213.0	4.5
Zinc Oxide		302.0	6.5
Rutile Non-Chalking Titanium Dioxide		105.0	3.0
Magnesium Silicate		325.0	13.6
Raw Linseed Oil	320.0	320.0	61.4
Bodied Linseed Oil (2-2 to 2-3) ..	105.0	105.0	13.1
Lead Naphthenate (2%)		6.9	0.7
Manganese Naphthenate (6%)		1.2	0.2
Mineral Spirits		124.0	19.0
		1532.1	102.0

Pigment = 63.5%

Vehicle = 36.5%

P.V.C. = 33.8

Pig./Gal. Paint = 9.7 lbs.

Consistency

Pigment Analysis

White Lead 24.9%
Zinc Oxide 31.0%
Rutile Non-Chalking
Titanium Dioxide 10.8%
Magnesium Silicate 32.3%
100.0%

Vehicle Analysis

Raw Linseed Oil 57.4%
Bodied Linseed Oil 18.8%
Thinner and Drier 23.8%
100.0%

The consistency of this paint will vary depending upon the raw materials used. The oil content may be altered slightly to improve working properties.

L.I.A. NO. H-3
HOUSE PAINT

	<u>Pounds Non-Vol.</u>	<u>Total Pounds</u>	<u>Gallons</u>
White Lead.....		163.0	1.0
Zinc Oxide.....		302.0	4.5
Anatase Free-Chalking Titanium Dioxide.....		130.0	1.0
Magnesium Silicate.....		321.0	13.5
Raw or Refined Linseed Oil.....	251.2	251.2	32.5
Bodied Linseed Oil (2-2 to 2-3)....	140.0	140.0	17.5
Lead Naphthenate (2%).....		6.4	0.7
Manganese Naphthenate (6%).....		1.1	0.1
Mineral Spirits.....		157.2	24.2
		1471.9	102.0

Pigment = 62.2%

Vehicle = 37.8%

P.V.C. = 35

Pig./Gal. Paint = 9.1 lbs.

Consistency

Pigment Analysis

White Lead.....	17.8%
Zinc Oxide.....	33.0%
Anatase Free-Chalking Titanium Dioxide.....	14.2%
Magnesium Silicate.....	35.0%
	100.0%

Vehicle Analysis

Raw or Refined Linseed Oil.....	45.2%
Bodied Linseed Oil (2-2 to 2-3)....	25.2%
Thinner and Drier.....	29.6%
	100.0%

oThe free-chalking Anatase titanium dioxide may be replaced in whole or in part by ~~semi~~-non-chalking anatase to reduce chalking and erosion with some increase in dirt collection.
oThe consistency of this paint will vary depending upon the raw materials used. The oil content may be altered slightly to improve working properties.

L.I.A. NO. 10-37
HOUSE PAINT - TINT BASE

	<u>Pounds</u> <u>Non-Vol.</u>	<u>Total</u> <u>Pounds</u>	<u>Gallons</u>
White Lead.....		163.0	3.0
Zinc Oxide.....		302.0	6.5
Rutile Non-Chalking Titanium Dioxide.....		105.0	3.0
Magnesium Silicate.....		345.0	14.5
Raw Linseed Oil.....	251.2	251.2	32.5
Bodied Linseed Oil (2-2 to 2-3).....	140.0	140.0	17.5
Lead Naphthenate (24%).....		6.4	0.7
Manganese Naphthenate (6%).....		1.1	0.1
Mineral Spirits.....		157.2	24.2
		1470.9	102.0

Pigment = 62.2%

Vehicle = 37.8%

P.V.C. = 35

Pig./Gal. Paint = 9.1 lbs.

Consistency

Pigment Analysis

White Lead.....17.8%
Zinc Oxide.....33.0%
Rutile Non-Chalking
Titanium Dioxide.....11.5%
Magnesium Silicate.....27.7%

100.0%

Vehicle Analysis

Raw Linseed Oil.....45.2%
Bodied Linseed Oil (2-2
to 2-3).....25.2%
Thinner and Drier.....29.6%

100.0%

*The consistency of this paint will vary depending upon the raw materials used. The oil content may be altered slightly to improve working properties.

L.I.A. NO. M-4
HOUSE PAINT

	<u>Pounds Non-Vol.</u>	<u>Total Pounds</u>	<u>Gallons</u>
White Lead (Stil.).....		296.0	5.5
Zinc Oxide.....		262.0	5.6
Anatase Free-Chalking Titanium Dioxide.....		110.0	4.3
Magnesium Silicate		825.0	9.5
Raw or Refined Linseed Oil.....	282.0	282.0	36.5
Bodied Linseed Oil (2-2 to 2-3)....	124.0	124.0	15.5
Lead Naphthenate (21%).....		6.7	0.7
Manganese Naphthenate (6%).....		1.2	0.2
Mineral Spirits.....		158.0	24.2
		1194.9	102.0

Pigment = 61.7%

Vehicle = 38.3%

P.V.C. = 32.4

Pig./Gal. Paint = 9.2 lbs.

Consistency

Pigment Analysis

White Lead.....32.1%
Zinc Oxide.....28.3%
Anatase Free-Chalking
Titanium Dioxide.....15.2%
Magnesium Silicate.....24.4%

100.0%

Vehicle Analysis

Raw or Refined Linseed Oil.....19.3
Bodied Linseed Oil (2-2 to
2-3).....21.7
Thinner and Drier.....29.0

100.0

*The free-chalking anatase titanium dioxide may be replaced in whole or in part by semi-non-chalking anatase to reduce chalking and erosion with some increase in dirt collection.
*The consistency of this paint will vary depending upon the raw materials used. The oil content may be altered slightly to improve working properties.

L-144. NO. R-47
HOUSE PAINT-TINT BASE

	Pounds Non-Vol.	Total Pounds	Gallons
White Lead.....		296.0	5.8
Zinc Oxide.....		262.0	5.6
Rutile Non-Chalking Titanium Dioxide.....		112.0	3.8
Magnesium Silicate.....		251.0	10.6
Raw Linseed Oil.....	282.0	282.0	36.5
Bodied Linseed Oil (2-2 to 2-3)....	124.0	124.0	15.5
Lead Naphthenate (2%).....		6.7	0.7
Manganese Naphthenate (6%).....		1.2	0.2
Mineral Spirits.....		158.0	24.2
		1492.9	102.0

Pigment = 61.7%

Vehicle = 38.3%

P.V.C. = 32.3

Pig./Gal. Paint = 9.2 lbs.

Consistency

Pigment Analysis

White Lead 32.1%
Zinc Oxide 28.4%
Rutile Non-Chalking
Titanium Dioxide 12.2%
Magnesium Silicate 27.3%
100.0%

Vehicle Analysis

Raw Linseed Oil 49.3%
Bodied Linseed Oil (2-2 to
2-3) 21.7%
Thinner and Drier 29.0%
100.0%

The consistency of this paint will vary depending upon the raw materials used. The oil content may be altered slightly to improve working properties.