

NATIONAL LEAD COMPANY

Member of the Producers Council

Paint Materials for the Protection and Decoration of Wood, Brick, Stone, Concrete, Stucco, Metal

NEW YORK, N. Y., 111 Broadway
BOSTON, MASS., National-Boston Lead Co., 800 Albany Street
BUFFALO, N. Y., 116 Oak Street
CHICAGO, ILL., 900 West 18th Street
CINCINNATI, OHIO, 659 Freeman Avenue
CLEVELAND, OHIO, 820 West Superior Avenue

PHILADELPHIA, PA., John T. Lewis & Bros. Co., Widener Building
PITTSBURGH, PA., National Lead & Oil Co., 316 Fourth Avenue
ST. LOUIS, MO., 722 Chestnut Street
SAN FRANCISCO, CAL., 2240 24th Street

Dutch Boy Products

Dutch Boy White Lead—Pure white lead ground in pure linseed oil. Just as white lead paint has been the standard for generations, so has Dutch Boy White Lead been a standard among white leads for years. Eight out of every ten painters use Dutch Boy. Soft paste as well as heavy paste form.

Dutch Boy Red Lead in Oil—A very highly oxidized grade of pure red lead ground in pure linseed oil to paste consistency. Its exceptionally high true red lead (PbO₂) content and the fineness of its pigment particles insure a paint of excellent brushing qualities, good coverage and extreme durability. 100-lb. kegs; 50, 25 and 12½-lb. pails.

Dutch Boy Liquid Red Lead—A ready-to-use, pure red lead paint weighing 28 lbs. to the gallon. Equivalent to paint made by mixing 1.85 gals. linseed oil with 100 lbs. Dutch Boy Red Lead in Oil (paste red lead). Composition by weight: Pure red lead (98% true red lead)—81%; pure raw linseed oil—18%; pure liquid drier—1%. 2½-gal. kegs; gallon and quart cans. Can also be had tinted in light and dark brown, light and dark green, and black.

Dutch Boy Wall Primer—A special primer for sealing and first-coating plaster walls to be painted with white lead. It is a full bodied paint made with a long oil vehicle of varnish type. Stops suction, seals fire cracks, and at same time, gives good hiding. Possesses the elasticity, adhesion and other qualities of an oil primer combined with the recognized sealing property of a varnish primer, producing an ideal foundation for succeeding coats. 5, 1, and ½-gal. cans.

Dutch Boy Linseed Oil—Clear, carefully filtered, well settled, pure linseed oil conforming to the specifications of the American Society for Testing Materials. 1 and 5-gal. sealed cans.

Dutch Boy Flatting Oil—A skillfully blended flatting liquid for use with white lead to produce flat and semiflat paint for interior walls and woodwork. When white lead is thinned with flatting oil a paint results which possesses many points of excellence. It is easy to apply. It has good hiding power. It levels itself nicely. It sets slowly, so that large areas can be worked without risk of laps. It is durable and washable. Quart, gallon and 5-gal. cans.

General Painting Specifications

Following are general specifications for the painting of interior and exterior surfaces:

Preparation of Surface—(1) **Woodwork**—New woodwork shall be cut smooth with sandpaper where required and dusted clean before priming. From old woodwork which has been painted before, all loose paint, scale, dirt and dust shall be removed. Wash off with benzine or turpentine all parts where liquid paint remover has been used.

After the priming coat on new woodwork is applied, all knots and sap streaks shall receive one coat of shellac varnish brushed out thin and all dents, cracks and other defects shall be filled with putty composed of white lead and whiting.

(2) **Plaster**—Before applying any paint to plaster, either new or old, see that it is clean and smooth. Fill all cracks and holes with patching plaster. Where new plaster to be painted is not properly aged, it shall be treated before priming with a solution made by dissolving 2 lbs. of zinc sulphate in 1 gal. of water.

(3) **Brick and Stone**—New brickwork shall not be primed until dry. At least 2 or 3 days of dry weather shall precede



pointing. If any mortar has become loose or damaged all such places shall be pointed with mortar before applying paint. After priming, correct small defects in the surface with putty.

(4) **Stucco and Concrete**—Stucco or concrete shall be allowed to stand and dry at least six months before paint is applied. If painted before this time, it shall be treated with a solution made by dissolving 2 lbs. of zinc sulphate in 1 gal. of water.

(5) **Metal Work**—Iron, steel and other metal work shall be cleaned thoroughly of all loose paint, dirt, oil, grease, rust, scale and other foreign matter before paint is applied.

The Paint and Its Application—(6) **Designation of Paint to be Used**—All woodwork, plaster, brick, stone, concrete and stucco which are to be painted, shall be painted with NATIONAL LEAD COMPANY'S Dutch Boy White Lead, Dutch Boy Flatting Oil, Dutch Boy Wall Primer, pure linseed oil, pure turpentine and pure drier mixed according to the formulas hereinafter designated for each kind of work. All metal shall be painted with NATIONAL LEAD COMPANY'S Dutch Boy Red Lead-in-oil, Dutch Boy Liquid Red Lead, or pure dry red lead and pure linseed oil mixed according to formulas hereinafter given for each specific purpose.

(7) **Tinting Materials**—In producing tints and shades, John T. Lewis & Bros. Co. colors-in-oil or those of equally high grade shall be used. If colors-in-oil are used in quantities large enough to affect the consistency of the paint, the quantities of thinners named in the formulas shall be increased in amount equal to one-half the weight of the tinting material.

(8) **Applying the Paint**—No exterior painting shall be done when rain or snow is falling, during fog, or until after dew or moisture which may be on the surface has completely disappeared. Painting done in winter weather shall only be done when the temperature is above 50° F. and when all surfaces are dry. All exterior work shall be allowed to dry not less than 3 days before the next coat is applied and at least 2 days shall be allowed between coats on interior work.

Formulas

The following white lead formulas take no account of tinting materials. See paragraph No. 7 when adding colors to the formulas.

It will be noted that the formulas for painting exterior wood are on the basis of Dutch Boy soft paste White Lead as well as heavy paste white lead. For flat effects inside, the heavy paste is to be preferred as the higher oil content of the soft paste will give more of a sheen to surfaces painted with it.

(9) **New Woodwork Outside**—Three coats of paint, mixed as follows, shall be applied to new unpainted woodwork outside:

	(a) Priming coat	(b) Second coat
	Soft Paste	Heavy Paste
Dutch Boy White Lead	100 lb.	100 lb.
Pure linseed oil	3¼ gal.	4 gal.
Pure turpentine	2 gal.	2 gal.
Pure drier	1 pt.	*1 pt.

	(c) Third coat
	Soft Paste
Dutch Boy White Lead	100 lb.
Pure linseed oil	2¼ gal.
Pure turpentine	1 qt.
Pure drier	1 pt.

*When boiled oil is used, reduce drier to ½ pt.

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(10) **Old Woodwork Outside**—Two coats of paint as follows shall be applied in repainting old woodwork outside:

	(a) First coat	(b) Second coat
	Soft Paste	Soft Paste
Dutch Boy White Lead	100 lb.	100 lb.
Pure linseed oil	1 1/2 gal.	2 gal.
Pure turpentine	2 gal.	2 gal.
Pure drier	1 pt.	1 pt.

*When boiled oil is used, reduce drier to 1/2 pt.
Note: In sections where dirt discoloration or mildew is prevalent, preliminary on exposures not subjected to direct sunlight, better results will be obtained by reducing the linseed oil in the first coat, for both uses and old woodwork outside, by 1/2 gal. and increasing the turpentine by 1 pt.

(11) **New Woodwork Inside**—Three coats of paint, mixed as follows, shall be applied to new unpainted woodwork inside:

	(a) Priming coat	(b) Second coat
Dutch Boy White Lead (heavy paste)	100 lb.	100 lb.
Dutch Boy Flatting Oil	3 gal.	2 gal.
Pure linseed oil	3 gal.	None
Pure drier	1 pt.	None

	(c) Third coat (heavy paste)	(d) Third coat (Eggshell gloss finish)
Dutch Boy White Lead	100 lb.	100 lb.
Dutch Boy Flatting Oil	2 gal.	1 1/2 gal.
Floor varnish	None	1/2 gal.

(12) **Old Woodwork Inside**—Two coats of paint shall be used in repainting woodwork inside. For a flat finish, mix the paint for the first and second coats according to formula B in paragraph 11. For an eggshell gloss finish, mix the paint for the first coat according to formula B in paragraph 11 and according to formula D for the finishing coat.

(13) **Plaster Walls**—Three coats of paint shall be applied to plaster which has never before been painted. The priming coat shall be Dutch Boy Wall Primer or the following:

Dutch Boy White Lead (heavy paste)	100 lb.
Pure boiled linseed oil	3 gal.
Floor varnish	2 gal.
Pure turpentine	1 1/2 gal.

*If boiled linseed oil is not available, use 5 gal. pure raw linseed oil and 1 1/2 pt. drier.

Mix the paint for the second coat according to formula B in paragraph 11 and according to formula C for the finishing coat if a flat finish is desired. If an eggshell finish is wanted, mix the paint for the finishing coat according to formula D. In repainting plaster walls, follow the practice recommended for new plaster, except that the priming coat may be omitted.

(14) **Stucco, Concrete, Brick and Stone**—Three coats of paint, mixed as follows, shall be applied to stucco, concrete, brick or stone which has never before been painted:

	(a) Priming coat	(b) Second coat
	Soft Paste	Soft Paste
Dutch Boy White Lead	100 lb.	100 lb.
Pure linseed oil	2 1/2 gal.	3 gal.
Spar varnish	2 gal.	2 gal.
Pure turpentine	1 1/2 gal.	1 gal.
Pure drier	None	1 pt.

*Boiled oil is recommended. If it is not available use pure raw linseed oil and add 1 1/2 pt. pure drier.

	(c) Third coat (Gloss finish)	(d) Third coat (Flat finish)
	Soft Paste	Soft Paste
Dutch Boy White Lead	100 lb.	100 lb.
Pure linseed oil	2 1/2 gal.	3 gal.
Dutch Boy Flatting Oil	None	None
Pure turpentine	1 pt.	2 gal.
Pure drier	1 pt.	None

*When boiled oil is used, reduce drier to 1/2 pt.

In repainting stucco, concrete, brick or stone, apply two coats. Mix the paint for the first coat according to formula B in paragraph 14 and according to formula C or D for the second coat.

A semigloss finish on brick, stone, concrete and stucco can be secured by applying over the second coat one or two coats of paint made with 100 lbs. heavy paste white lead, 1 1/2 gal. flatting oil and 1/2 gal. spar varnish. For brick red finish on outside brick thin the color with Dutch Boy Flatting Oil.

(15) **Metal Work, Exterior and Interior**—Three coats of paint, mixed as follows, shall be applied to exterior and interior metal work:

	(a) First coat	(b) Second coat (light brown)
Dutch Boy Red Lead-in-oil	100 lb.	100 lb.
Pure linseed oil	2 1/2 gal.	2 1/2 gal.
Lampblack-in-oil	None	12 oz.
Pure turpentine	1 pt.	1 pt.
Pure drier	1 pt.	1 pt.

	(c) Third coat (dark brown)
Dutch Boy Red Lead-in-oil	100 lb.
Pure linseed oil	2 1/2 gal.
Lampblack-in-oil	6 lb.
Pure turpentine	1 pt.
Pure drier	1 pt.

Pure dry red lead 100 lb.
 Pure linseed oil 2 1/2 gal.
 Lampblack-in-oil 6 lb.
 Pure turpentine 1 pt.
 Pure drier 1 pt.

*If genuine boiled linseed oil is available, use one-third boiled and two-thirds raw oil, omitting drier.

If liquid red lead is to be used, specify Dutch Boy Liquid Red Lead No. 1 (natural red lead color) for first coat, Dutch Boy Liquid Red Lead No. 6 (light brown) for second coat and Dutch Boy Liquid Red Lead No. 7 (dark brown) for third coat.

Where a dark color other than brown is desired for the finishing coat, one of the following formulas shall be used according to the color desired:

	Light green	Dark green
Dutch Boy Red Lead-in-oil	100 lb.	100 lb.
Pure linseed oil	5 1/2 gal.	4 gal.
Lithium chrome yellow-in-oil	30 lb.	12 1/2 lb.
Chinese blue-in-oil	12 lb.	2 lb.
Pure turpentine	1 pt.	2 pt.
Pure drier	1 pt.	1 pt.

Dutch Boy Red Lead-in-oil 100 lb.
 Pure linseed oil 14 gal.
 Chinese blue-in-oil 16 lb.
 Lampblack-in-oil 32 lb.
 Pure turpentine 7 1/2 gal.
 Pure drier 1/2 gal.

If liquid red lead is to be used, specify Dutch Boy Liquid Red Lead according to the finishing color desired, that is: No. 8—light green; No. 9—dark green or No. 5—black.

Specifications in Pamphlet Form
 Specifications for the use of white lead and red lead in painting are available in pamphlet form and will be sent to any architect or engineer interested. Write for "Specifications for the use of White Lead" or "Standard Specification for the use of Red Lead."

Other Publications
 A practical book, of unusual value to those interested in the subjects of paint and painting, is our "Handbook on Painting." This book gives formulas and directions for exterior and interior work of all kinds. It covers, in complete detail, the painting of wood, plaster, brick, stone, concrete, stucco and metal.

We also publish a booklet, "Structural Metal Painting," which discusses the causes of corrosion and remedies for it, besides giving formulas and going into detail on the subject of painting structural metal of all kinds.