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HOW TO SELECT HIGH QUALITY EXTERIOR HOUSE PAINTS

High grade exterior paints contain no water. They contain at least 62% of pigments, the balance being water-free oils and thinners. The pigment portion consists of at least 85% of lead—lead and zinc—or combinations of lead, zinc and titanium. The liquid in these paints consists of at least 80% of linseed oil or linseed-tung oil combinations, the balance being volatile thinner and drier. The best grades have a complete hiding power over a black surface of at least 200 square feet per gallon. In the light tinted paints, the same composition prevails except for the addition of the necessary tinting colors.

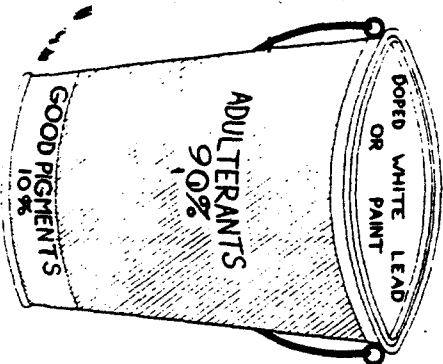
The proper selection of the ingredients and the skill used in processing influence the physical properties of a paint, such as hiding power, brushability, tint retention, and durability. These factors are of the maximum importance to the consumer in selecting one out of several brands, all of which might meet the minimum composition requirements referred to above. Therefore, when purchasing paints, look either for the formula label or for the seal of quality which is implied by the name of a reliable manufacturer. For those who desire information regarding the function of the ingredients in good paints, a brief discussion is presented below.

White Lead. Best lead carbonate is basic lead sulphate and durable white pigment which produces elastic film. When used alone, many over to three times the surface area of other white pigments.

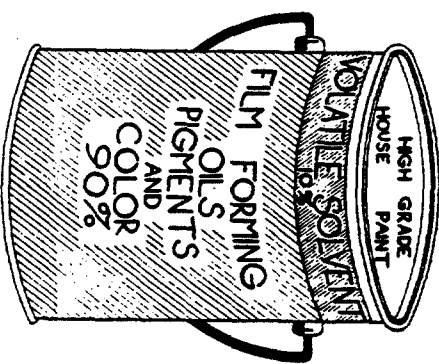
Zinc Pigments. Zinc oxide is a pigment of great whiteness and good hiding power. When added to paint, it increases the firmness of the surface and because of its resistance to the percentage of ultraviolet light, it is one of the best pigments for the purpose of preventing fading. Zinc oxide and driers combine to form a combination pigment consisting of basic lead sulfate and zinc oxide. Pure Zinc Sulfide is a very white pigment of excellent opacity.

Titanium Pigments. Titanium oxide or titanium-barium pigments have greater whiteness and hiding power than any other known white pigments. Some of them have ten times the tint strength of white lead. They have another desirable function in preventing the chalking or all-weathering which is sometimes observed in paints which do not contain this ingredient.

Lead Pigments. Such pigments as china clay, magnesium silicate, silica, calcium carbonate, calcium sulphate, and barium sulphate are sometimes employed to an extent of not over 15% of the weight of the pigment portion in the paint. These pigments are used to increase the opacity of the paint and to give it a more uniform appearance. They also retard setting in the paste, which would be shown by heavy pigments.



WARNING:
If you select white lead paint, be sure that it is not adulterated, as adulterated lead and adulterated white pigments have been the cause of many paint failures and damage to the property of the user. Be sure that the user lead is properly labeled with the word "WARNING" and other failure results in chalking, all-weathering, and other failure.



NOTICE:
The illustration shows graphically the volume relation of a high grade exterior prepared paint ready for application. In use in accordance with the directions on the label will avoid defects and give the property owner the best possible service.

Tinting Colors. Relatively small amounts of tinting colors (from 1% to sometimes as high as 15%) are added to white base paints to produce light and medium tints. These pigments, which are expensive to produce, are made from iron oxides, iron sulfides, iron sesquioxide, green, carbon, iron and lamp blacks, titanium, cerium, iron oxides, and, in certain cases, color lakes and toners.

For certain solid colors, the majority of the pigment in the paint must consist of such colors as are referred to above, with relatively small amounts of the white base pigments or mixtures thereof.

Linseed Oil. Raw linseed oil is the basis of most exterior paints. It produces paints of extremely easy brushing properties.

Prepared Oil. Prepared oils such as heat-treated tung and linseed oils are sometimes used in certain types of exterior paints where an especially high gloss is desired.

Thinners. Turpentine and mineral spirits are the thinning materials employed in exterior paints to reduce the consistency of a paint so that it will spread easily and uniformly. The consistency of a paint is applied to the entire percentage of thinning material has evaporated. Usually not over 15% of the entire liquid portion of exterior paints consists of thinning material.

Driers. Metallic salts of cobalt, lead and manganese are used in extremely small amounts (usually less than 1% of the oil employed in a paint) in order to set up the oil to a firm film within twelve hours after application.