

So-Called Plastic Paint

RECENTLY CR has received a number of requests for information on several brands of paint of a peculiar and novel type, advertised as "plastic paint." The reason for this interest lies in the extreme nature of the claims for these new products made in the manufacturer's advertising literature. To a person not familiar with the types and limitations of paints, *Insul-mastic's* claim that its product is equal to 20 coats of paint that will resist winds, weather, rust and rot, sticks like glue, and wears like iron, sounds just like what the human race has been waiting for, in the way of a paint coating. Another brand, *Cello-Plastic*, is a shade more modest perhaps, claiming that one coat of *Cello-Plastic* (exterior) is equivalent to five coats of ordinary paint, and that it is fade-proof, weather-proof, water-resistant, has high insulation value and covers all surfaces—even old weather-beaten wood—in one coat. Other brands, such as *Hollywood Plastic*, claim to be "strongly resistant to acid" and better than paint because it will outlast it. The advertising claims, upon casual reading, are very attractive and persuasive and are cleverly written to give them the appearance of claiming more than they actually do when read with care and a coldly analytical eye. For example, the claim of high insulating value is extremely misleading. The plastic paint *may* very well have a relatively high insulating value compared with ordinary paint, but, as ordinary paint has practically no insulating value, and is not relied

on for reducing heat losses from a house, the plastic paint *could* have a *relatively* high insulation value; yet the property would be of strictly negligible significance to consumers.

Price comparisons, too, are misleading. The price per gallon of one brand of the product is said to be only slightly more than that of good quality exterior paint, but no figures are given on its spreading power (square feet covered per gallon), which is the basis upon which any valid comparison of the costs of ordinary paint with paints of an unusual type or consistency must be made. If the claims of giving a coat several times thicker than ordinary paint are truthful, obviously spreading power of the plastic paint must be but a fraction of that of ordinary paint and its cost to cover a given area several times as great. Another claim that it will last for years is likewise meaningless, for ordinary paint, even if not of the best grade, can truthfully claim this same property when conditions are favorable.

CR has made no tests of these paints, for there would be no point in spending time and money on such a test; even if tests should be made and substantiate the manufacturers' claims (which is most unlikely), so-called plastic paints would not be recommended as house paints for several reasons. Paints of the good' old-fashioned sorts made by the best makers are known to be very satisfactory by virtue of the fact that they have been time-tested in actual use or on

test fences for several years. The performance of such paint is *known*, and regularly and continuously being tested under scientifically controlled conditions. Such paints, moreover, are made by firms that regularly carry on research work under competent scientific direction. No such data are available or likely to be available for some years on plastic paints, for there is no shortcut laboratory method that can give a reliable prediction of the performance of a paint to be exposed for a long time to the action of the weather in diverse climates.

The claim of one of the brands of being equivalent in thickness to 20 coats of paint also should probably be regarded as a disadvantage rather than an advantage, for experience with paints has shown that coatings of such excessive thickness usually prove short-lived and fail in a very unsightly manner. One of the most important considerations is that when painting a house, the cost of the paint is only a small proportion of the total cost, much the larger proportion being the cost of labor. It would therefore seem to us extremely unwise to use any paint about which little or nothing is known as to its life, adherent properties or other important qualities. Further, if the product were satisfactory as to life and adhering properties, it might be very unsatisfactory in one respect which is fundamental to all good paints,—that is, it might not be possible to paint over it satisfactorily later, which could make repainting extremely difficult and probably very costly. This

factor of repaintability which we have discussed in our BULLETINS covering the house, and it is a mental factor in all cases of paint selection.

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All experiments with new products should be by commercial and industrial users only, who can take risks, not by consumers. Until such time as products of this type are proved to be satisfactory, and are shown to have some merits which

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STATE officials in California have reported the dangerous product containing saccharic acid in commercial manufactured sherbet cream, jams, jellies, carbonated beverages, vermou, fountain juices and other products. It is typical of adulterants that no firm using the material endeavored to determine its wholesomeness, yet all were in place of such tart substances as citric acid, tartaric acid and other substances, which are scarce at present, but have wide use in normal various sweets and products. When analyzed, it was found saccharic acid itself non-edible grade or quality was not only unstable in composition, as shown

factor of repaintability is one which we have discussed in various BULLETINS covering paints for the house, and it is a fundamental factor in all questions of paint selection.

If the plastic paint should prove wholly unsatisfactory, its removal, which would be necessary to prepare the wood surface properly for repainting, might be a very difficult and costly job.

All experiments on such new products should be done by commercial and industrial users only, who can afford to take risks, not by consumers. Until such time as products of this type are proved to be satisfactory, and are shown to have some merits which old-style

paints do not possess, our advice would be not to use them, with one possible exception, an exception however of decidedly unusual character. Such an exception *might* be in a case of fixing up a building having such bad paint that it cannot be repaired without undue expense and is to be patched up only to get through the present war emergency, with the expectation that it will be torn down or extensively renovated afterward.

As we go to press the St. Louis Better Business Bureau has exposed the false claims and poor performance of one of this class of products, which is known as *Lin-Tite Liquid Plastic*, "scientists' greatest development in protective coating,"

which was sold by shady and high-pressure methods in the St. Louis area. It was advertised as "guaranteed permanent" and it was claimed that it never blisters, cracks, chips, or peels, that it gives "everlasting beauty" and "complete protection," yet examination of a house to which this product was applied in August 1942 at a cost of \$410 disclosed the coating to be peeling and flaking in a number of places; in other places it had become powdery and was developing cracks.

It is interesting to note that a two-coat paint job by a reputable paint contractor for the same house could have been secured for \$175, or \$235 less than it cost to use *Lin-Tite*.

A New and Dangerous Wartime Food Adulterant

STATE officials in California have reported the use of a dangerous product called saccharic acid in commercially manufactured sherbets, ice cream, jams, jellies, carbonated beverages, vermouth, soda fountain juices and other products. It is typical of the use of adulterants that none of the firms using the material had endeavored to determine beforehand its wholesomeness or safety, yet all were using it in place of such tart substances as citric acid, tartaric acid, lactic acid and other such substances, which are exceedingly scarce at present, but were in wide use in normal times in various sweets and beverage products. When analyses were made, it was found that the saccharic acid itself was of a non-edible grade or quality, and was not only unstable in its composition, as shown by blow-

ing out of numerous heads of wooden barrels in which it was shipped, but contained toxic metallic contaminations (arsenic and lead) as well as hydrocyanic acid (one of the most poisonous of all chemical substances) and oxalic acid, also a very poisonous material.

There was a very obvious menace to health in the use of such materials as an acidifier for foods and beverages, many of which were of the sort much used by children. From the consumers' standpoint, the most important factor in the situation is its pointing up again the way in which manufacturers will buy and use a product for flavoring or adulteration of food, and then let later events determine whether the choice of the material was a wise one. (This has happened with copper salts and various coal tar

substances used in the dyeing and coloring of foods, with monochloroacetic acid and with diethylene glycol used as adulterants and preservatives in food manufacture, and in scores of other cases.) California is to be congratulated for the activity of its Bureau of Food and Drug Inspections in this case, for its analyses resulted in the quarantining of a total of over 5,000 gallons of saccharic acid, as also many thousands of gallons of vermouth, sherbet, carbonated beverages, and miscellaneous food substances, soda fountain syrups, etc., and 50,000 cases of jam. The Federal Food and Drug Administration, too, has proceeded in a number of cases against saccharic acid and has brought about seizures of quantities of the substance, and withdrawal from the market of other outstanding lots.