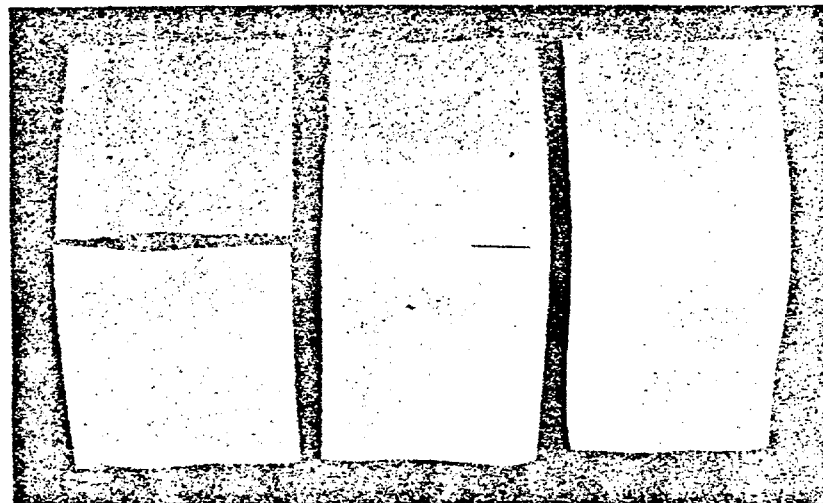


lead-stabilized house paints have sustained flexibility

Three paint films (typical commercial formulations) exposed to accelerated weathering for the same period, and each bent over a 1/32-inch mandrel. White lead content, left to right, is 0.0%, 12.5%, and 35.0%. The vehicle in each case was identical.



"LEAD" LENGTHENS THE LIFE OF PAINT BECAUSE:

It Stabilizes . . .

neutralizes acidic compounds resulting from the decomposition of the vehicle—prevents the film from becoming soft or liquefying.

It Plasticizes . . .

forms lead soaps which increase film flexibility.

It Strengthens . . .

flexible, spiny lead soap particles mechanically reinforce the film and increase elastic strength.

It Resists Water . . .

paint films with an optimum lead pigment content absorb only a small fraction as much water as they otherwise would.

It Limits Oil Penetration . . .

more of the vehicle remains in the film where it is needed; less is absorbed in the substrate.

It Improves Appearance . . .

by controlling chalking and inhibiting mildew.

Another positive demonstration of the superior flexibility of white lead house paints over other types was recently conducted at the request of the White Lead Technical Committee of Lead Industries Association. The results, shown here, confirm those of other standard test methods, which consistently have indicated that the greater plasticity and stability of paints containing white lead result in a more flexible, longer lasting film.

"Lead" *stabilizes* paint by providing a means of capturing destructive acidic compounds as they form during the normal weathering of the vehicle. Left alone, these compounds soften the film, thus greatly shorten its life. In lead pigment paints they are immobilized, through their reaction with the pigment, to form useful, stable, insoluble lead salts in the film.

"Lead" *plasticizes* paint by forming spiny, interlocking (felted) lead soaps through reaction with the vehicle. These compounds are ideal plasticizers, allowing the film to adhere closely to surfaces, yet expand and contract under stress without cracking.

In short, "lead" paints provide a *strong* film that gets *stronger* with initial weathering . . . stays intact *longer* than other types.

For the formulation of these three test specimens, for test procedure, or for any information relative to the importance and use of white-lead pigment in house paints, write: *Lead Industries Association, 420 Lexington Avenue, New York 17, N. Y.*

LIAC2976



Visit our booth No. 35 at the Sixteenth Annual Paint Industries' Show, October 31 through November 3, for the complete story of "lead" in better paint formulations.

⊕1084