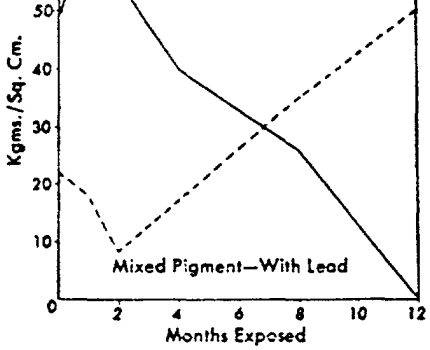
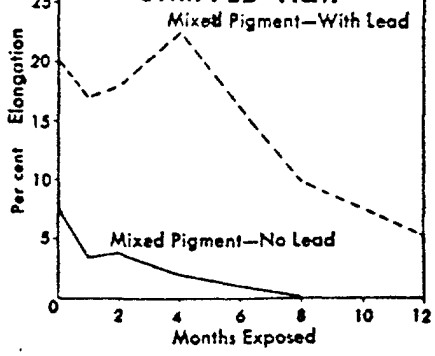
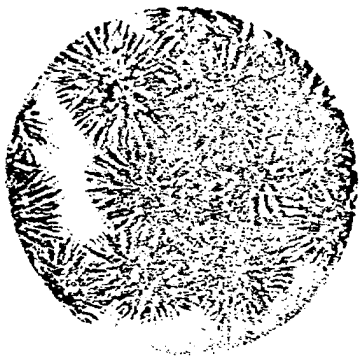


Strength-age graph shows how mixed pigment paint containing "lead" increases in tensile strength as it ages.



Elongation-age graph shows how the flexibility of a paint film is improved by the incorporation of "lead".

Photomicrograph showing the meshing of the spiney lead soap crystals.



"lead" adds elastic strength to a paint film

—that's one important reason for using enough lead pigment in your house paints

You obtain increased elastic strength in a paint film by the use of white lead pigments. This is so because lead pigments reinforce the film mechanically.

The lead soaps formed by chemical reaction with the vehicle are made up of extremely flexible, spiney crystals which look like cockleburs. They intermesh and intertwine and form a felted mat which mechanically strengthens the film. Both the toughness and the distensibility of the film are increased as it ages.

This increased elastic strength is just another reason why it pays to include "lead" in your formulations. And use enough of it to take full advantage of the many desirable qualities that white lead pigments impart — qualities which mean better paints, greater consumer satisfaction and larger sales.

For detailed information on the most effective use of "lead" in your paints . . . write to *Lead Industries Association, 420 Lexington Avenue, New York 17, N.Y.*

"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, spiney crystals in lead soaps 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.

LIA02967

This advertisement or version thereof appears in the following publications: American Paint Journal, Aug. 28 and Dec. 18; Paint, Oil & Chemical Review, Aug. 17; Official Digest, Aug.; Western Paint Review, Oct.; Oil, Paint & Drug Reporter, Nov. 27.