



Testing* Lead Chromate Paint

Background

Lead chromate is not often found in interior or exterior household paints. However, marine and industrial paints can contain lead chromate pigments. Paints containing lead chromate pigments include colors that are bright yellow, red, orange and some greens. Paints that are pastel or neutral in color do not contain lead chromate pigments.

LeadCheck® Swabs will detect the lead in these paints but it will take longer (up to 18 hours) for color to develop. In general, where lead chromate pigments are present, the higher the lead chromate concentration, the shorter the LeadCheck® development time. You can get a better idea of the development time by testing the paint with both LeadCheck® and ChromateCheck™ Swabs as described below. [If no chromate is found when the surface is tested using ChromateCheck™ Swabs, then LeadCheck® Swab test results should be instant.

Two Phase Test Method

A. Use LeadCheck® Swabs

1. Clean the surface with a household cleaner, rinse and dry.
2. Cut a small V-shaped notch (about ¼ inch long) to expose all painted layers down to the bare surface.
3. Activate a LeadCheck® Swab according to the directions supplied with the kit.
4. Rub swab tip on the test surface for about 30 seconds.
5. If the swab tip does not turn pink, and a lead chromate pigment is suspected:
6. Squeeze a drop of fluid from the swab onto one of the dots on the Test Confirmation Card.
DO NOT LET THE SWAB TIP TOUCH THE CARD!
7. If the drop of fluid turns the dot on the confirmation card pink, embed a paint chip in the tip of the swab and seal the swab and chip in a zip-lock plastic bag for further observation.
8. Observe the tip of the swab and/or surface tested. If a lead chromate pigment is present, pink will appear on the test surface or swab tip in as few as 5 to 10 minutes, or as long as 18 hours depending on the lead chromate concentration in the paint.

B. Use ChromateCheck™ Swabs: Confirm the presence of chromate ion with ChromateCheck™

1. Prepare a second notch on the painted surface as described above.
2. Activate a ChromateCheck™ Swab according to the directions and rub the swab into the prepared notch for 30 seconds. A pink to purple color indicates the presence of chromate pigments.

Interpretation of Results

1. If ChromateCheck™ is positive, chromate pigments are present. LeadCheck® development time will be longer.
2. A delayed positive result with LeadCheck® Swabs indicates lead chromate pigments are present.
3. A positive ChromateCheck™ result and a negative LeadCheck® result indicates that chromate pigments other than lead chromate pigments may be present. Other chromate pigments such as zinc or copper chromate are not hazardous.

*LeadCheck® Swabs are a versatile and sensitive screening tool for the detection of lead on any surface. This note provides a suggested method to allow testing for a specific application. Additional information and help are available by calling 800-262-5323 or 508-651-7881.

TESTING FOR LEAD AND CHROMATE IN LEAD CHROMATE PAINTS

Lead chromate containing paint was specially formulated for Hybrivet Systems, Inc by DL Laboratories. The concentration of lead chromate in the standard paint was 10%. Dilutions of this standard were made with a blank alkyd paint of the same composition as the test paint without the lead chromate. Each sample was rubbed for 30 seconds.

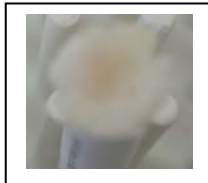
LeadCheck[®] Swabs Tests on Lead Chromate Containing Paint



LeadCheck[®] Swab Blank on
0% Lead Chromate Paint



LeadCheck[®] Swab on Lead
Chromate Paint (0.7% Pb)



LeadCheck[®] Swab on Lead
Chromate Paint (0.9% Pb)



LeadCheck[®] Swab on Lead
Chromate Paint (1.2% Pb)

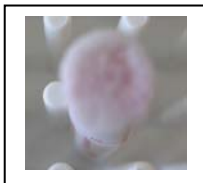


LeadCheck[®] Swab on Lead
Chromate Paint (1.7% Pb)

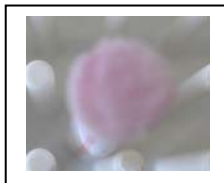
ChromateCheck[™] Swabs Tests on Lead Chromate Containing Paint



ChromateCheck[™] Swab 2 minutes after
reaction with 0% Pb chromate paint.



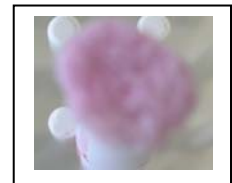
ChromateCheck[™] swab on Pb
chromate paint (0.1 % Cr⁺⁶).



ChromateCheck[™] swab on Pb
chromate paint (.15 % Cr⁺⁶).



ChromateCheck[™] swab on Pb
chromate paint (0.2 % Cr⁺⁶).



ChromateCheck[™] swab on Pb
chromate paint (0.3 % Cr⁺⁶).