

Testing* for Lead in Solder

Background:

LeadCheck® Swabs can be used to screen for lead solders used in household plumbing. In 1986 lead solders were banned from use on plumbing lines that brought incoming water to a tap. While the law bans the use of solder in excess of 0.2% lead, the truth of the matter is that the lowest concentration of lead found in household solder is 37%. The detection limit of LeadCheck® Swabs for lead in solder can be as low as 0.1%. At greater than 0.1%, a LeadCheck® Swab quickly turns pink to red when testing commonly used tin/lead solders. LeadCheck® Swabs will not turn pink when testing lower than 0.1%, or "lead free" solder.

City or State building code inspectors in several states including Texas and Ohio use LeadCheck® Swabs in the field to determine if the solder used conforms to Federal Codes.

Method:



1. Wipe the surface dirt off the solder joint of your pipe with a paper towel or cloth.
2. Rub the solder joint with an emery board or rough up the surface with a piece of sandpaper.
3. Activate a LeadCheck® Swab according to the directions.
4. Squeeze the swab until a drop of the yellow/orange liquid drops onto the prepared solder surface.
5. Touch, DO NOT RUB, the swab tip to the wet solder surface and dab gently for ten seconds or less*.

Interpretation:

1. If the tip of the swab turns pink or red, the solder contains greater than 0.1% lead. The solder does not pass the Federal Code requirement for lead free solder.
2. If the tip of the swab turns purple high levels of tin have been detected. Repeat the test making sure to just touch the tip to the solder surface - Do Not Rub!

Note: *Vigorous rubbing may cause a metallic film to be deposited on the swab. Do not rub the solder joint with the swab too long.

*LeadCheck® Swabs are a versatile and sensitive screening tool for the detection of lead on any surface. This applications 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.