

Bullet Hole Testing Kit

Instructions for Use

Safety:

Prevent eye contact with the materials in the kit. Wash hands after use.

If there is a burning sensation, wash the affected area with water and get medical attention.

Testing for the presence of Lead (Pb)

Testing for the presence of lead is done using tube #1 (which contains a solvent) and tube #2 (which contains a color reagent for lead).

Examination for the presence of lead:

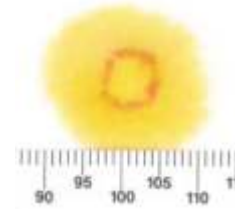
- 1 Prepare test paper. Break the ampoule in tube #1. Hold the paper by the edge and drop 2-3 drops on the rough side of the paper until it becomes damp (the source of the pungent smell is from the acetic acid that is in the tube).
- 2 Press the rough side of the test paper for about 30 seconds directly against the suspected bullet hole (refrain from movement/sliding of the paper).
- 3 Pull the test paper away from the suspect hole. Break the ampoule in tube #2 and shake lightly (an orange color appears). Drop a few drops from tube #2 on the damp area (rough side) of the test paper (a yellow background is seen).
- 4 **The appearance of a red / purple color on the paper indicates the presence of lead.**

Testing for the presence of Copper (Cu)

Testing for the presence of copper is done using tube #3 (which contains a solvent) and tube #4 (which contains a color reagent for copper).

Examination for the presence of copper:

- 5 Prepare test paper. Break the ampoule in tube #3. Hold the paper by the edge and drop 2-3 drops on the rough side of the paper until it becomes damp. (the source of the pungent smell is from the ammonia that is in the tube).
- 6 Press the rough side of the test paper for about 30 seconds directly against the suspected bullet hole (refrain from movement/sliding of the paper).
- 7 Pull the test paper away from the suspect hole. Break the ampoule in tube #4. Drop a few drops from tube #4 on the damp area (rough side) of the test paper.
- 8 **The appearance of a green / black color on the paper indicates the presence of copper**



Color reaction for lead



Color reaction for copper

Interpretation of Findings / Results

If the suspect hole was caused by a bullet, a color reaction should be observed in either one or both of the tests.

Non-observance of a color reaction does **not exclude the possibility** that the hole was caused by a bullet.

In the case of a hole caused by a contact or close to contact shot, one would expect to receive and observe a color stain that resembles a cloud or covers most of the test paper.

Examination Summary

- 1 The hole number should be noted on the test paper. The suspect hole and the test paper with a positive color reaction should be photographed (along with a scale).
- 2 Each used test paper should be individually placed in an empty plastic bag (supplied with the kit) marked, and transferred along with the results to the investigating unit. The test papers and photographs are evidence and may be later used in court.
- 3 At the end of the examinations, used tubes should be properly discarded.
- 4 The color reaction for lead fades with time. Sometimes, it can be enhanced by re-applying the reactants from tubes 1 & 2.