Phenolphthalein Presumptive Blood Test

1. Purpose

To provide the procedure for the Phenolphthalein presumptive blood test.

2. Summary

The reagents are tested with a positive and negative control. An item with suspected blood staining is sampled using a swab or filter paper and the phenolphthalein reagents are applied. A positive result occurs with an immediate color change to bright pink.

3. Procedure

1. Test a Positive Control: Use a moistened swab or filter paper to obtain a sample from the Known Bloodstained sample. Perform the desired test upon this sample before testing the evidence stain. This test is used to ensure the reagents are working properly and must produce a positive result. The results of the test must be documented in the case notes at the time the test is performed.

2. Test a Negative Control: use a moistened swab or filter paper to obtain a sample from an unstained area adjacent to the evidence stain. Perform the desired test upon this sample before testing the evidence stain. This test is used for contaminants and must produce a negative result. The results of the test must be documented in the case notes at the time the test is performed.

3. Test the Stain Sampling: moisten a cotton-tipped swab or piece of filter paper with water. Gently rub suspect stain with the moistened swab to transfer a sample of the suspected stain to the swab or paper. Do not perform the test directly upon the suspected stain. The results of the test must be documented in the case notes at the time the test is performed.

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4. Sample the suspected stain or control to be tested as directed above.

5. Add one drop of alcohol to the sample area of the filter paper or swab.

6. Add a drop of the Phenolphthalein reagent to the sample area of the filter paper or swab.

7. Add one drop of Hydrogen Peroxide to the sample area of the filter paper or swab.

8. A positive result is indicated if a bright pink color change is observed within several seconds of the application of Hydrogen Peroxide. The development of a bright pink color after the addition of the first two reagents, but before the addition of the hydrogen peroxide, indicates that a contaminant is present, and the test is considered to be invalid. Pale color development is considered inconclusive. A negative result is indicated by a lack of a color change or a color change that occurs greater than 10 seconds after the application of the Hydrogen Peroxide.

9. Document the result in the case notes.

4. References

Medtech Forensics Phenolphthalein Blood Test Kit

5. Definitions

N/A