
TECHNICAL INFORMATION

Phenolphthalein Solution

Catalog No. DCB101

INTRODUCTION

When suspect spots or stains that might be blood evidence are discovered at the crime scene, a presumptive blood identification test should be used to determine if the substance is blood or not. Determination of the type of stain will determine if the spot or stain should be further analyzed as blood, including sampling for further lab analysis possibly including DNA.

The Kastle-Meyer (phenolphthalein) reagent is used to identify blood. The reagent reacts with the heme component of the blood resulting in a color change to pink. This test is presumptive, since it identifies any blood that has a heme component, not necessarily human blood.

CAUTIONS

- Before using this product, consult the appropriate Material Safety Data Sheets (MSDS) found on our website at www.sirchie.com/support.



- Solution contains zinc metals and potassium hydroxide. At minimum, safety glasses and chemical resistant gloves should be worn when using this chemical.

MATERIALS/CHEMICALS REQUIRED:

Ethanol (95% or greater purity)

Distilled water

3% Hydrogen peroxide

Disposable pipettes or droppers

PROCEDURE (transfer method)

1. Apply distilled water to a transfer medium: blotter paper, filter paper, or a cotton swab
2. Press the transfer medium against the suspect stain to transfer some of the suspect substance to the medium.
3. Add 2-3 drops of ethanol to the surface of the transfer medium
4. Add 2-3 drops of the DCB101 Phenolphthalein Solution to the transfer medium.
5. Wait a few seconds and make sure there is no color development.
6. If no color development, add 2-3 drops of 3% hydrogen peroxide.
7. A bright pink color should develop in the presence of blood. If the color is not pink, the substance is most likely not blood.



Phenolphthalein color reaction.

REFERENCES:

DNA Analyst Training Laboratory Training Manual Protocol 2.15 Bloodstain Indication: Kastle-Meyer Test, National Forensic Science Training Center, http://www.nfstc.org/pdi/lab_manual/Linked%20Documents/Protocols/pdi_lab_pro_2.15.pdf, accessed 6/6/2014