Technical Procedure for Amido Black

1.0 Purpose – This is a blood print development procedure.

2.0 Scope – This procedure applies to items of evidence, porous and non-porous, that contain impressions in blood that require enhancing.

3.0 Definitions – N/A

4.0 Equipment, Materials and Reagents

4.1 Equipment and Materials

- Protective gloves and apron/coat
- Face shield visor and/or safety goggles
- Magnetic stirrer, magnetic follower, and magnetic retriever
- Two (2) 2000 mL glass beakers
- One (1) 1000 mL glass beaker
- Dark, shatter-proof container

4.2 Reagents

- 5-Sulfosalicyclic acid (20 g)
- Naphthalene 12B, Napthol Blue Black, or Amido Black (3 g)
- Sodium carbonate (3 g)
- Formic acid (50 mL)
- Acetic acid (50 mL)
- Kodak Photo Flo 600 Solution (12.5 mL)
- Distilled water

5.0 Procedure

5.1 Preparation

5.1.1 Pour five hundred (500) mL of distilled water into a clean two thousand (2000) mL glass beaker and place on a magnetic stirrer.

5.1.2 Place a magnetic follower in the distilled water and stir while adding the following in order:

- 5-Sulfosalicyclic acid (20 g)
- Napththalene 12B, Napthol Blue Black, or Amido Black (3 g)
- Sodium carbonate (3 g)
- Formic acid (50 mL)
- Acetic acid (50 mL)
- Kodak Photo Flo 600 Solution (12.5 mL)

5.1.3 Stir until all crystals are dissolved.

5.1.4 Dilute mixture to one (1) liter with distilled water.

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5.1.5 Solution may be stored indefinitely as there is no expiration period.

5.2 Application

5.2.1 Forensic Scientists shall produce a self-made test print to be processed concurrently with items of evidence. (See Section Technical Procedure for Ensuring Quality Control.)

5.2.2 Amido Black may be applied to evidence either by using a spray bottle or by dipping the evidence. Completely cover the target area and allow to develop for approximately three (3) to five (5) minutes. Rinse item with tap water to remove any excess reagent after development.

5.3 Standards and Controls – N/A

5.4 Calibration – N/A

5.5 Sampling – N/A

5.6 Calculations – N/A

5.7 Uncertainty of Measurement - N/A

6.0 Limitations – Amido Black may stain lighter background surfaces.

6.1 Amido Black will not detect the normal constituents of latent impressions; therefore, Amido Black must be used in sequence with other processing techniques. It is essential to develop any traditional latent impressions prior to treatment with Amido Black. Careful treatment with powders before Amido Black will not interfere with Amido Black Processing. Ninhydrin, if used, must precede the application of Amido Black.

6.2 Some impressions in blood on porous surfaces such as paper or cardboard may be improved by using Physical Developer after the application of Amido Black. Washing the item in a warm detergent solution after the Physical Developer treatment will reduce the Amido Black background staining. Use one (1) mL of Tergitol 7 per liter of distilled water at 50 °C, if the item of evidence will withstand this temperature. Wash the item until the background stain is reduced to acceptable levels.

6.3 Amido Black solution may be kept indefinitely in a dark, shatter proof container.

7.0 Safety – Amido Black shall be used only in a well ventilated area such as a fume hood. The glacial acetic acid and formic acid in the solution may be corrosive. Eye protection shall be worn when preparing and transporting the reagent, and when processing items with the solution.

7.1 This solution may also be used at crime scenes provided that proper safety precautions are applied; however, only use in well ventilated areas or utilize a fan to remove the fumes produced.

8.0 References

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9.0 Records – N/A

10.0 Attachments – N/A

Revision History		
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09/17/2012	1	Original Document
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