

Standard Operating Procedures for Latent Print Processing with Amido Black (Methanol Base)

1 Scope

Amido Black (methanol base) is used by latent print personnel to develop latent prints and enhance visible prints that have been deposited in blood.

2 Equipment/Materials/Reagents

Beakers or graduated cylinders

Balance

Spatula

Distilled water

Squirt bottles, sprayers, brushes, or glass trays

Glass bottles

Magnetic stirrer and stir bar(s)

Naphthol Blue Black (dye content $\geq 85\%$)

Glacial Acetic Acid

Methanol

Fume hood

3 Standards and Controls

Not applicable.

4 Sampling or Sample Selection

Not applicable.

5 Procedures

5.1 Solution Preparation

a) Developer solution

Combine:

- Naphthol Blue Black - 2 g
- Glacial Acetic Acid - 100 ml
- Methanol - 900 ml

Stir until Naphthol Blue Black dissolves (approximately 30 minutes).

b) Rinse solution

Combine:

- Glacial Acetic Acid - 100 ml
- Methanol - 900 ml

5.2 Application

Note: All blood must be dried prior to application.

Note: Process may damage painted surfaces.

- Apply developer solution to specimen by spraying, dipping, painting, or squirting.
- Leave developer solution on specimen for 30 to 60 seconds.
- Apply rinse solution.
- Rinse with water.
- Allow specimen to dry.
- For digital capture and photography, see FBI Latent Print Units Processing Manual Preamble .

5.3 Storage

Developer and rinse solutions must be stored in glass bottles.

5.4 Shelf Life

Developer and rinse solutions have indefinite shelf lives provided the reagent checks are satisfactory.

5.5 Reagent Checks

See FBI Latent Print Units Processing Manual, Preamble

6 Calculations

Not applicable.

7 Measurement Uncertainty

Not applicable.

8 Limitations

Not applicable.

9 Safety

See FBI Laboratory Safety Manual for appropriate information.

10 References

FBI Laboratory Safety Manual, Federal Bureau of Investigation, Laboratory Division. Latest Revision.

FBI Latent Print Units Processing Manual, Preamble, Federal Bureau of Investigation, Laboratory Division. Latest Revision.

Sears, V. G. and Prizeman, T. M. "Enhancement of Fingerprints in Blood - Part 1: The Optimization of Amido Black." *JFI*. 50(5):470.

Trozzi, T. A., Schwartz, R. L., and Hollars, M. L. *Processing Guide for Developing Latent Prints*, FBI Laboratory, Washington DC, 2001.

<u>Rev. #</u>	<u>Issue Date</u>	<u>History</u>
0	01/13/14	Original document issued. Derived from Discontinued Latent Print Operations Manual, Standard Operating Procedures for Processes Used to Develop Latent Prints. The original Latent Print Units Processing Manual consisted of a single document with a preamble and procedures for all processes. The current document separates each into its own separate document.
1	10/02/17	Specific section numbers referenced in Preamble removed throughout document. Section 1, latent print personnel added. Section 4 removed and remaining renumbered. Titles for new Section 4 and Section 7 modified. Section 9, generalized. Updated for Biometrics Analysis Unit. References updated.

Approval

Redacted - Signatures on File