**Development of Latent Prints (LP) Lab**

**Objective:** To recover and preserve latent fingerprints on various materials using common methods.

**Materials:**

Black fingerprint powder

Soft-bristle fingerprinting brush

Transparent tape

Superglue

Glass microscope slides

Empty soda cans

Compact discs

Empty glass bottles

Latex or Nitrile gloves

Small paper cup

Fuming chamber

0.6% Ninhydrin solution

Black felt tip markers

**Procedure:**

*Fingerprint powder (FP)*

1. Rub your fingers through your hair, on your forehead or behind your ear to pick up oils.
2. Place a fingerprint on to one of the nonporous objects available in the lab (compact discs, glass bottles, soda cans, or glass microscope slides).
3. Apply a small amount of the black fingerprint powder with the brush. Be sure to tap or twist excess powder from the bristles back into the container.
4. Using a circular pattern, swirl the brush over the print. The bristles should just glaze the surface of the object. The print should begin to appear.
5. Lift the prints with transparent tape and apply the tape to the space provided in this lab packet.
6. Provide the following information near the affixed tape:
	1. Date and time
	2. Your name
	3. Location of recovery (ex. Soda can found near the body, CD found in the suspect’s vehicle, etc.)
	4. Collection method (black FP powder)

*Superglue Fuming*

1. Place a fingerprint on a nonporous surface. Make sure that your fingers are not overloaded with oil.
2. Label the object with your name in a location away from your planted fingerprint(s).
3. Place a small paper cup, filled halfway with water, inside the fuming chamber.
4. Place a few drops of superglue to the inverted empty soda can over the heat source (light bulb).
5. Immediately cover the fuming chamber and observe the progress of the fuming. Remove the lid when the print appears completely developed.
6. Remove the item from the fuming chamber and examine your fingerprint. The ridge pattern should appear white.

**CAUTION: ACRYLIC VAPORS ARE A NASAL MEMBRANE IRRITANT. AVOID INHALATION.**

1. Dust the prints with contrasting color powder, and lift the prints with transparent tape. Apply the tape to the space provided in this lab packet.
2. Provide the following information near the affixed tape:
	1. Date and time
	2. Your name
	3. Location of recovery (ex. Soda can found near the body, CD found in the suspect vehicle, etc.)
	4. Collection method (CA fuming, black FP powder)

*Ninhydrin*

1. Obtain a piece of paper. Warm up your hands (the sweatier, the better) and touch the paper. If you have dry hands, ask a classmate to touch your paper.
2. Label a corner of the paper with your name using a black felt tip marker.
3. Put on a pair of disposable gloves.

**CAUTION: NINHYDRIN IS A SKIN IRRITANT. AVOID DIRECT SKIN CONTACT WITH THE NINHYDRIN SOLUTION.**

1. Using a spray bottle, evenly spray the paper with 0.6% Ninhydrin solution.
2. Allow the paper to dry. Blue-purple fingerprints should start to appear over time.
3. Attach and submit the paper with the developed prints with this lab packet.

***LP development with fingerprint powder***

*Apply tape with fingerprints here*

**Date and time:**

**Recovered by:**

**Location of recovery:**

**Collection method:**

***LP development with Superglue Fuming***

*Apply tape with fingerprints here*

**Date and time:**

**Recovered by:**

**Location of recovery:**

**Collection method:**