
TECHNICAL INFORMATION

Primer Residue Collection Kit for SEM

Catalog No. GRA200

INTRODUCTION

The GRA200 is designed for use by departments that anticipate submitting evidence for Scanning Electron Microscopy (SEM). The GRA series kits feature special alloy aluminum specimen mounts that contain no barium, antimony, or lead—the most common constituents in cartridge residue. GRA tests are specific and sensitive for collection of gunshot residue using SEM techniques and are economical and uncomplicated.

Control test firings show that the concentration of gunshot residue significantly declines after approximately 4 hours. Therefore, samples taken more than 4 hours after firing may not be acceptable for analysis.



CAUTIONS

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

- The person taking samples **MUST** have hands that **DO NOT** possess gunshot residues. Collector must wash hands thoroughly and put on latex, powder-free gloves before collection.
- To avoid contamination, **DO NOT** touch the subject's hands. The collector should use one hand to grasp the subject's arm above the wrist during the collection procedure.

PROCEDURE

The collection device consists of a plastic vial with a tightly fitting cap. The metal stubs in the caps are equipped with a carbon adhesive tab used for lifting residue.

Remove the cap from the vial. *There is no tab cover to remove. The device is now ready for use.* Once the collecting surface is exposed, take care not to drop the stub or contaminate the collecting surface by allowing the adhesive tab to come into contact with any object other than the area that is to be sampled.

Avoid heavily soiled or bloody areas as much as possible.

When pressing the stubs on the questioned areas, apply sufficient pressure to cause a slight indentation into the surface of the skin.

STEP 1: Right Back

- A. Carefully remove the cap from the vial labeled **RIGHT BACK**.
- B. Grasp subject's arm above the wrist. Do not touch subject's hands.
- C. While holding the vial cap securely, press the collecting surface of the stub onto the back of the suspect's hand until the web area shown has been covered (see STEP 1 Illustration).



STEP 1—Rt. back



D. After sampling the back of the suspect's hand, return the cap to the **RIGHT BACK** vial.

STEP 2: Right Palm

Repeat the procedure described in Step 1 using the metal stub in the vial labeled **RIGHT PALM**. Be certain to sample the area of the palm (see STEP 2 Illustration).

STEP 3: Left Back/Left Palm

For collection from the left hand, repeat Steps 1 and 2 using the vials labeled **LEFT BACK** and **LEFT PALM**.

STEP 4:

After sampling all four areas, return the capped vials to the kit box.



STEP 2—Rt. palm



FINAL INSTRUCTIONS

- Fill in all of the information required on the enclosed DATA SHEET, and place it in the kit box.
- With the exception of the **gloves**, return components to the kit box. *Dispose of the gloves according to accepted practices.*
- Reassemble the kit box, affix the Integrity Seals where indicated on the kit box top, and initial both seals.
- Complete all forms required by the agency designated to examine the kit.
- Submit the kit and completed forms to the designated agency.



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