

TECHNICAL INFORMATION

Primer Residue Collection Kit for SEM Catalog No. GRA300

INTRODUCTION

The GRA300 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, are economical, and are not complex.

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



TI10-669FNG-REV1

- To avoid contamination of the sample, the person taking samples should wash hands thoroughly before the sampling and MUST wear latex, powder-free gloves during 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.
- When possible, collection should occur at scene of the crime or apprehension of the suspect to avoid other chances of contamination.

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. To use, remove the cap from the vial. There is no tab cover to remove. The device is now ready for use.

Caution: 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 Hand

A. Carefully remove the cap from the vial labeled RIGHT HAND.

- B. Grasp subject's arm above the wrist. NOTE: 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).
- D. Continue by sampling the palm of subject's right hand until the web area shown has been covered (see Step 1 Illustration).

Step 2: Left hand

- A. Repeat the procedure described in Step 1 using the metal stub in the vial labeled LEFT HAND. Be certain to sample the web area of the back of the subject's left hand.
- B. Continue by sampling the palm of subject's left hand until the web area has been covered





FINAL INSTRUCTIONS

- A. Fill in all of the information required on the enclosed GSR Analysis Sheet, and place it in the kit envelope. Fill out the Chain of Evidence Label on the kit envelope
- B. With the exception of the gloves, return components to the kit envelope.
- C. Dispose of the gloves according to accepted practices.
- D. Seal the kit envelope, affix the Integrity Seal where indicated on the kit envelope, and initial the seal.
- E. Complete all forms required by the agency designated to examine the kit.
- F. Submit the kit and completed forms to the designated agency.



100 HUNTER PLACE, YOUNGSVILLE, NC 27596 USA 919-554-2244 • 800-356-7311

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