TECHNICAL INFORMATION

Small Particle Reagent (SPR) Kit

Catalog No. SPR300

INTRODUCTION

Small Particle Reagent (SPR) is composed of finely ground particles suspended in a detergent solution. These particles adhere to the fatty constituents of latent fingerprints to form a visible deposit. Latent prints developed using this material may be lifted using standard lifting mediums.

Two solutions included in the kit are:

1. SPR100 (dark)—This reagent contains molybdenum disulfide particles. Latent prints will appear a dark gray color, and it should be used on light surfaces.

2. SPR200 (white)—This reagent contains titanium dioxide particles. Latent prints will develop into a white color, and it should be used on dark surfaces.

A third (optional) solution of SPR is also available—SPR400UV (fluorescent). This reagent contains a fluorescent substance. It was

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developed for use on multicolored backgrounds. A longwave ultraviolet lamp, or any of SIRCHIE's BLUEMAXX™ lights, is needed to view developed prints.

SPR is especially useful for recovering latent prints from wet surfaces such as beverage cans or bottles, automobile bodies, and glass surfaces. It is also very useful on oxidized and galvanized metal. Small items of evidence may be immersed in the solution, but larger objects should be sprayed with SPR.

CAUTIONS

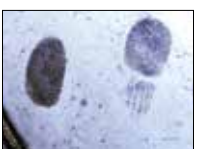
- Before using this kit, consult the appropriate Material Safety Data Sheets (MSDS) found on our website at www.sirchie.com/support.
- Seek immediate medical attention if any of this material is swallowed. Keep away from children.
- Wear disposable gloves to avoid contaminating the surface to be tested and to avoid the possibility of skin irritation.
- Wear eye protection when using this material.
- Test this process on non-evidential items to gain familiarity with the process.
- If any of this material contacts the skin or eyes, flush with water.
- Some people may develop allergic reactions to the detergent in this product as a result of repeated skin contact. This is especially true of people sensitive to household detergents.

PROCEDURE

Prior to use, remove the standard bottle cap and replace it with the spray head supplied. After use, remove the spray head and replace the standard cap. These reagents may be used on most non-porous surfaces, even if they are wet.

1. If reagents are being used outdoors during rain, shelter the area to be treated from direct rainfall.
2. Shake the container ***VIGOROUSLY*** before each application.
3. The spray head nozzle is adjustable. When not in use, twist the nozzle to the off position. When applying the spray, rotate the nozzle to permit a conical spray, not a steady stream.
4. These reagents are most effective when used on vertical surfaces. Spray the area to be examined starting at the top and working down. If signs of fingerprints appear, continue spraying immediately above the relevant area until there is no more buildup of reagent deposit. As the solution drains away, a residue will adhere to the surface. More of the powder will remain on any latent prints present.
5. Excess powder may be removed from any developed prints with the application of a light water spray. DO NOT spray directly onto any latent prints present. Allow the water to flow down over them. The water should carry away much of the residue.

Apply SPR to a non-porous surface such as an automobile exterior. The resulting prints are shown below.



6. When you are certain that the latent prints are fully developed, allow the surface to dry completely.
7. Photograph any useful prints present. If using the SPR400UV formula, it will be necessary to darken the area and use longwave ultraviolet light or BLUEMAXX™ as a light source.
8. Lift the prints using any suitable lifting medium.

NOTE: *If prints appear weak or lack sufficient detail, reprocess them beginning with Step 2.*

Tray Development

1. Prior to use, shake the bottle of reagent ***VIGOROUSLY.***
2. Place a quantity of the reagent into a tray. Use enough reagent to completely cover the object to be examined.
3. Rock the tray back and forth, allowing the liquid to pass over the area to be examined.
4. If latent prints appear, continue agitation of the liquid until the prints are of sufficient contrast, and then remove the object from the tray.
5. Rinse off the residue using running water. DO NOT allow flowing water to come into direct contact with any developed latent prints.
6. Allow the object to dry completely, and then photograph and lift any latent prints present.

Cleanup

These reagents will not permanently stain most painted surfaces. An application of soap and water will remove any residue present.

Photography

Both color and B&W films have been used successfully with SPR, but color is preferred. It's important to photograph developed evidence before each enhancement procedure so the evidence is preserved from accidental destruction.

SPR300 CONTENTS:

- 2- SPR1001 Dark SPR, 500ml
- 2- SPR2001 White SPR, 500ml
- 2- KCP220 Dispenser Spray Heads
- 2- KCP221 Bottles, Plastic for Rinse Water, 500ml
- 3- SF00771 Disposable Latex Glove, Pairs
- 1- 236T16 Spray Magic Cleaner, 16 oz. (473ml)
- 1- 144L4 Transparent Lifting Tape, 4" x 360" (10.2cm x 9.1m)
- 6- KCP238 Plastic Sheet, 4" x 10" (10.2cm x 25.4cm), 10 mil
- 12- FPT1C1 Super Cleaner Towelettes
- 1- 144L2 Transparent Lifting Tape, 2" x 360" (5.1cm x 9.1m)
- 1- LB0011 Lifted Print Backing Pad, 5.5" x 8.5" (14cm x 21.6cm), 50 shts.
- 1- KCP110 Scissors, 5" (12.7cm)
- 1- KCP223 Towel Storage Box, Plastic
- 1- SPR3001 Texturized, Molded-Plastic Carrying Case; Dimensions: 17.5" x 10.125" x 8.875"(44.4cm x 25.7cm x 22.5cm); Weight: 11.2 lbs. (5.1kg)