
TECHNICAL INFORMATION

All-Purpose Evidence Recovery Kit

Catalog No. PVS200

INTRODUCTION

The PVS200 Kit opens a whole new realm of possibilities for the crime scene evidence technician. Using liquid silicone materials is not new to the CSI—what's new is the delivery method.

Silicone materials used in evidence collection consist of a base material and a catalyst (hardener). The PVS200 eliminates the guesswork in achieving the correct mixture ratio. Simply load the gun and pull the trigger. Mixing is done automatically in a unique mixing nozzle. The PVS200 extruder gun uses equal amounts of base material and catalyst (polyvinyl siloxane). Pulling the trigger forces both substances into the mixing nozzle and out the end of the spreader tip.

This incredible formula is the perfect method for lifting powdered latent prints from textured, irregular or curved surfaces. PVS200 contains 3 formula cartridges: brown, white and transparent. The transparent formula enables direct viewing of the



print. In many instances, transparent print lifts may be placed directly onto a flatbed scanner and scanned into a computer. Opaque formulas (brown and white) produce a reversed image (see examples shown to the right).

CAUTION

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

PROCEDURE

Loading The Extruder

1. Release the cartridge latch.
2. Insert the piston driver into the gun and hold up the release.
3. Pull the top latch back to the raised position.
4. Insert the cartridge into the latch assembly.
5. Push the top latch down to lock cartridge in place.
6. Push the piston driver forward to engage the cartridge.
7. Remove the cartridge end-cap and set it aside.
8. Pull the trigger to ensure flow.



Resultant lift below using transparent compound, shows excellent ridge detail not apparent on textured surface above.



Powder developed latent print is lifted from quarter with intricate detail shown below.



Tool mark left behind in wood is cast using the brown compound of PVS200.



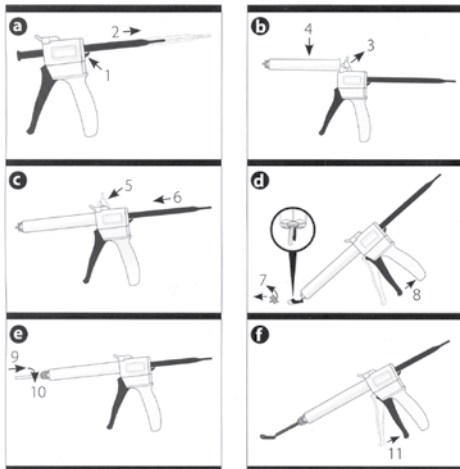
SETTING TIMES (minutes:seconds)		
TEMP. °C/°F	WORKING	SETUP
-30/-22	48:00	96:00
-20/-4	24:00	48:00
-10/14	12:00	24:00
0/32	6:00	12:00
10/50	3:00	6:00
20/68	1:30	3:00
30/86	0:45	1:30
40/104	0:23	0:45

9. Affix mixing nozzle.
10. Twist clockwise to lock.
11. Place the tip close to the surface where the impression is to be made and begin pulling the trigger until the silicone mixture begins to flow. Continue applying the silicone until the area to be lifted is fully covered. Allow 4-6 minutes for material to harden (resultant lift shown below).



CLEAN UP

No clean up is required after using the extruder gun. Simply remove the used nozzle and dispose of it. Replace the end-cap onto the cartridge, pull the piston driver all the way out of the cartridge, remove the cartridge and piston driver and return them to the kit. No wasted material and no mess to clean up.



Special Notes:

TRANSPARENT POLYVINYL SILOXANE (PVS200T) is primarily used to lift latent prints developed with powders. It is especially useful on textured or rough surfaces. By using a transparent mixture, the lifted print is seen right side up when looking through the material and it does not need to be reversed photographically. When applying transparent compound to a surface make a single smooth pass. Do not go back and forth to make the cast thicker as this will entrap air bubbles.

WHITE or BROWN POLYVINYL SILOXANE is mostly used for recovery of tool marks, bite marks, etc. The brown offers better photographic contrast and is the medium of choice when recovering tool mark impressions.

White Compound (PVS200W) is useful for recovering fingerprint impressions in soft materials such as putty or paint that dried after impressions were made. After lifting the impression, apply fingerprint ink to the cast and roll the print on paper.

Brown Compound (PVS200B) is an ideal medium for casting the inside of the barrels of firearms, especially if the weapon is incapable of being fired. To prepare the cast, plug one end of the barrel with a removable medium such as cotton. Fill the barrel from the opposite end with casting compound and allow 15-20 minutes curing time. Use a cleaning rod to push the cast back out of the barrel. Push against the cotton plug. The cast will exhibit the same markings as any bullets that have been fired through the barrel.

Note: When recovering impressions from tool marks or gun barrels, you may use the nozzles not equipped with spreader tips to allow a more concentrated flow into the impression.

APPLICATOR STICKS (PVS200AS) supplied with the No. PVS200 Kit are used to apply pressure to a cast immediately after the material is placed on the surface, ensuring that the material flows into the impressions to be recovered. The spatula will stick to the curing material. This will provide you with a handle to assist in cast removal. The spatula is easily removed from the cast after curing is complete.

CAT. NO.	REPLACEMENT SUPPLIES
PVS200W	White Dual Cartridge, 75ml
PVS200B	Brown Dual Cartridge, 75ml
PVS200T	Transparent Dual Cartridge, 75ml
PVS200NT	Nozzles with Spreader Tips, 12 ea.
PVS200N	Nozzles w/out Spreader Tips, 12 ea.

PVS200 CONTENTS:

- 1- PVS200EG Extruder Gun
- 12- PVS200N Nozzles with spreader tips
- 12- PVS200NT Nozzles w/out spreader tips
- 1- PVS200W White Dual Cartridge, 75ml
- 1- PVS200B Brown Dual Cartridge, 75ml
- 1- PVS200T Transparent Dual Cartridge, 75ml
- 10- PVS200AS Applicator Sticks
- 1- Molded Plastic Carrying Case w/pre-cut insert