

	LPU-PM 3.22 Sticky Side Powder	
	<i>Document #: 2603</i>	<i>Page 1 of 3</i>
	<i>Revision #: 1</i>	<i>Issued Date: 12/06/2017</i>
	<i>Document Manager: Tracee McIntosh</i>	<i>Approved By: Jeffrey Nye</i>

3.22 Sticky Side Powder

3.22.1 Introduction

The use of powder suspensions to develop impressions on the sticky side of tape has proven to be an effective alternative to the gentian violet technique. The use of powder suspensions to maximize contrast is the preferred technique on dark colored tapes lacking the availability of vacuum metal deposition. The consistent performance of powder suspensions on the adhesive side of tapes may, in the future, relegate the gentian violet technique to a secondary role when processing the adhesive side of tapes.

3.22.2 Safety Considerations

- Photo Flo 200
- Sticky Side Powder*

This procedure involves hazardous materials. This procedure does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this procedure to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. Proper caution should be exercised and the use of personal protective equipment should be considered to avoid exposure to dangerous chemicals. Consult the appropriate MSDS for each chemical prior to use.

3.22.3 Preparation

3.22.3.1 Method One

- Place approximately equal amounts of water, Photo-Flo 200 and Sticky-side Powder TM into a small jar or beaker. It should be the consistency of thin paint. More liquid or powder can be added to make the mixture thicker or thinner as the need dictates. Mix a total volume suitable for the application at hand.
- Use a small brush or camelhair fingerprint brush to "paint" the liquid mixture onto the adhesive side of the tape or label. This method has also been found to work on the backside of some tapes.
- Leave it on for 10 to 15 seconds and then rinse it off with water. The tape can be rinsed under running water, but the preferred method is to gently agitate it in a bowl of water.
- When most of the solution is rinsed off of the tape or label, examine it. Photograph any developed latent prints.
- If the solution is left on too long, it becomes difficult to rinse off. The solution will adhere too strongly to some tapes and labels. The solution may be applied but it must be rinsed immediately. The other alternative is to use Method Two for these types of tapes and labels.

3.22.3.2 Method Two

- An alternative method for processing adhesive tapes and labels which are not suitable for the painting process, is a soaking process. Add some Sticky-side Powder TM to a bowl or tray of water. The rinse water left over from Method One can be saved and used for this method.
- Agitate the bowl of water to stir up the Sticky-side Powder TM and submerge the tape pieces or labels with the sticky side up.

	LPU-PM 3.22 Sticky Side Powder	
	<i>Document #: 2603</i>	<i>Page 2 of 3</i>
	<i>Revision #: 1</i>	<i>Issued Date: 12/06/2017</i>
	<i>Document Manager: Tracee McIntosh</i>	<i>Approved By: Jeffrey Nye</i>

- Allow the floating particles of Sticky-side Powder™ to settle on the tape. This process may take some time to develop the latent prints. The resulting prints may also be rather faint.

3.22.3.2 Method Three

- Another variation is to add some Sticky-side Powder™ to a bowl or tray of water, which can be closed. The rinse water left over from Method One can be saved and used for this method.
- Agitate or shake the container to stir up the Sticky-side Powder™ until a large head of foam appears.
- Pass or draw the tape through the foam only.
- Rinse the tape as usual.

3.22.3.3 Commercially Available Methods

- Commercially available pre-mixed powder suspensions may be used following the same application method. Specific instruction included with the purchase shall be followed.
- Commercially available products that have been shown to produce latent prints include: Wetpowder and Wetwop

3.22.4 Instrumentation

See General Instrumentation

3.22.5 Minimum Standards & Controls

Powders, such as sticky side powder, work by adhering to latent print residue. Due to their inherent ability to adhere and discolor these materials, there is no need for test impressions to be done prior to evidence application.

3.22.6 Procedure or Analysis

- Immerse item to be processed in the working suspension or paint the mixture on the sticky side of the tape using a soft bristled brush.
- Allow the suspension to remain on the item for approximately 10 seconds.
- Remove the item from the suspension and rinse excess suspension from the item by washing with a gentle flow of cold tap water.
- This process may be repeated until optimum contrast is reached between the impressions developed and the background.
- Photograph any developed impressions.

3.22.7 Interpretation of Results

This technique has been shown to be very productive and stable. Impressions developed by the powder technique do not readily fade, however, all suitable latent impressions must be photographed. In addition, studies have shown that many powders can be used other than "Sticky Side Powder". This allows for the selection of a powder that will give maximum contrast with the background of the item being processed. If using powders other than "Sticky Side Powder" test impressions, on a similar type of tape, must be done as tests have shown that not all powders work well in this type of application. Other powders include various other colored or fluorescent fingerprint powders and Titanium Dioxide.

	LPU-PM 3.22 Sticky Side Powder	
	<i>Document #: 2603</i>	<i>Page 3 of 3</i>
	<i>Revision #: 1</i>	<i>Issued Date: 12/06/2017</i>
	<i>Document Manager: Tracee Mcintosh</i>	<i>Approved By: Jeffrey Nye</i>

3.22.8 Other Related Procedures

Gentian Violet

3.22.9 References

- Gray, M. Leanne. "Sticky-side Powder Versus Gentian Violet: The Search for the Superior Method for Processing the Sticky Side of Adhesive Tape"; Journal of Forensic Identification, 1996, 46, 3, 268-272.
- Kimble, Gary W. "Powder Suspension Processing"; Journal of Forensic Identification, 1996, 46, 3, 273-280.
- <http://www.cbdi.ai.org/Reagents/sticky.html>