



VALIDATION REPORT

Iron Oxide Powder Suspension

Summary

To process the adhesive side of light-colored tapes, the FBI Laboratory's Latent Print Operations Unit (Quantico) and Scientific & Biometrics Analysis Unit (Huntsville) currently use a carbon-based powder suspension known as Black Wetwop™ (BWW).

The purpose of this validation was to assess the performance of an iron oxide-based powder suspension (IOPS) as compared to BWW on the adhesive side of rubber-based adhesive tapes (duct, vinyl/electrical, and packing tape) and acrylic-based adhesive tapes (office tape- often referred to as Scotch™). Validation success was determined per tape substrate type.

As a result of a series of control tests, IOPS was shown to be 91.3% to 100% more effective than BWW at developing latent prints on tapes with rubber-based adhesive. Whereas BWW was shown to be 100% more effective than IOPS at developing latent prints on tapes with acrylic-based adhesive.

Therefore, IOPS passed the Quantico validation and Huntsville verification on the following adhesive substrates: duct, vinyl/electrical, and packing tape. IOPS did not pass validation on office tape.

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