Developing Latent Prints by Super Glue Fuming the Kenyan Way

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Developing Latent Prints by Super Glue Fuming the Kenyan Way

BY DETECTIVE JONATHAN PELLETIER, LYNCHBURG POLICE DEPARTMENT CRIME SCENE UNIT

SEARCH GOOGLE FOR "SUPER Glue Fuming" and 11,000 results pop up. Try "Cyanoacrylate Fuming" and you will get three times more results. Not one of the web sites will have information on The Kenyan Method because it was first used in Kenya in August of 2009 quite by accident, and it costs just a few dollars to achieve the same degree of success as using the elaborate filtered chambers that may sell for as much as $10,000.

It has long been known that with a heat source, such as a cup warmer or a simple lamp bulb with aluminum foil, one can accelerate the change of the liquid glue into a gas fume. Other techniques to speed up the process include applying the glue to substances such as cigarette ashes, saw dust, cardboard with baking soda or even pieces of a tampon. Many methods help jump start the process. All these necessary items are readily available for most, but in the remote regions of Kenya finding aluminum foil, electricity or even cigarette ashes can prove problematic.

The day prior to my flight to Nairobi, Kenya (where I would co-teach a Crime Scene Course on Vehicle Processing), I had an accident in the "Lab" section of my office. In my haste to refill a smaller 1 oz. container with the larger 16 oz. super glue supply, I spilled the glue and wiped it with a partially wet paper towel, tossing the wipe in to the garbage. To my surprise I had a smoking trash can with super glue fumes visibly pouring out of the top within seconds. I had heard about the exothermic reaction that super glue may have with certain substances but this was a wet paper towel, and it was not that warm to the touch, only fumes were still rising. Whether the increased surface area from the paper towels texture or the amount of glue spilled (approximately .5 oz) caused the reaction, I do not know.

Once in Kenya, I initially intended to use cigarette ashes to activate the super glue,
as I have used in Ashgabat, Turkmenistan and Baku, Azerbaijan. Out of a class of 28 students, however, no one smoked. Of the 3 local bars I visited raising suspicion by asking for ashes, only one had ashes and they were contaminated with a liquid. Quite by chance I was left to try to recreate what happened in my back office. We repeated the process successfully in Kenya for each of the 4 demonstrations, using a thin coat of glue wiped up with a half wet paper towel. Elevation or paper towel brand apparently does not affect the results. Nairobi rests at an elevation over 5000 feet, and Lynchburg is less than 1000 feet, nevertheless results were successful. The room temperature in my back office would have been approximately the same as the “winter” August temperatures in Nairobi, about 70-75 degrees Fahrenheit.

For departments that don’t have the budget for the larger indoor filtering chambers this is exciting news. Less money, less time and materials, less work; yet the same results are possible. Our department has used an expensive indoor fuming chamber for two years costing over $4,000 USD, and a vacuum chamber for over 8 years, also expensive. In comparing the results of latent fingerprint development, I found the Kenyan Method to have the same quality results with less time, money and effort.

Vague reports exist of a person getting burned as a result of the exothermic reaction between his cotton shirt and a super glue spill. Apparently it created an instant heat that resulted in 1st degree burns, but I could not confirm the report nor did the paper towel method, in comparison, appear to create heat beyond becoming slightly warm. (http://www.onin.com/tl/cyanoho.html#MakeYourClothingSmoke Retrieved August 21, 2009 1017 hrs)

Items needed:
1. Paper Towel
2. Water
3. Super glue
4. Container

Latent print developed with super glue fuming “The Kenyan Way” without a heat source. Pictured is the processed result of a clear plastic piece of packaging used as one of our test exhibits. This photo was taken outside in the shade using oblique lighting, and was shot with a 7.2 mega pixel pocket Sony Cyber-shot on scene. A lidless plastic kitchen container containing super glue wiped up with 1/2 wet paper towel, and the process was complete in 12 minutes start to finish. A control was placed on the inside of the transparent container. The process was stopped once the control print developed. When participants wiped through the developed print (above) amazement spread among the participants...it was fixed by the super glue or "locked in"? Two days after the completion of the course CID Director Wilson Kurui reported effectively using this technique on a homicide to develop quality latent prints.

JONATHAN PELLETTIER IS AN IAI-CERTIFIED SENIOR CRIME SCENE ANALYST

Jonathan Pelletier is the Head of the Crime Scene Unit of the Lynchburg City, Virginia Police Department. He travels abroad teaching crime scene courses for the Department of Justice/International Criminal Investigation Training Assistance Program (ICITAP). Approximately a third of Kenya’s Crime Scene Investigators participated in this recent two week training course discussed above. Plans for additional training programs are underway for the remaining Crime Scene Investigators throughout Kenya.

Pelletier co-instructed a CID Motor Vehicle Processing “Train the Trainers” course that was part of the Women’s Justice and Empowerment Initiative. He co-instructed with Dr. Nancy Cabelus, Senior Law Enforcement Advisor and program manager for the initiative.