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# TR-02-2002 "Coverup" Protective Covers for Evidence

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## **Executive Summary**

The "Coverup" is an eight sided clear plastic cover 11 ½" by 3 1/4" high which can be used by the initial officer on the scene to cover evidence (such as tire prints, footwear prints, blood, fibres, etc.) in order to prevent destruction or contamination. It can be secured in place by any of three methods: adhesive foam pads, nails placed through nail holes on its edge, or through use of four jagged slots along the edge which can be fastened to vegetation, etc.

Several of these covers were distributed across Canada and their use at crime scenes evaluated by Forensic Identification and general duty police officers. In a separate experiment, the use of the "Coverup" as a portable cyanoacrylate (CA) fuming container was tested.

The "Coverup" was found to be a useful means of protecting evidence at crime scenes, especially in wet or windy conditions. They were found to fasten well to smooth surfaces where they provided a clean standardized cover for small areas of interest or small pieces of evidence. Users felt that they were too small to adequately cover larger evidence such as many footwear and tire track impressions.

"Coverups" also proved to be effective portable CA fuming containers. For small areas on objects that are not easily transported to the identification laboratory, CA can be placed in a "Coverup" fastened to the surface, and development can be monitored through the clear plastic.

## Sommaire

Le Coverup est un couvercle octogonal en plastique transparent (de 11½ po sur 3¼ po de hauteur) que peut utiliser le premier policier arrivé sur les lieux d'un crime pour protéger les pièces à conviction (empreintes de pneus ou de pas, sang, fibres, etc.) et en empêcher la contamination ou la destruction. On peut le fixer de trois façons : au moyen de coussins en mousse adhésive, de clous insérés dans les orifices sur sa périphérie ou de quatre encoches dentelées sur son pourtour qu'on peut attacher à la végétation, etc.

Plusieurs couvercles ont été distribués au Canada, et des membres de l'Identité judiciaire et des agents de police aux services généraux en ont entrepris l'évaluation sur les lieux de crimes. Le Coverup a aussi été testé en tant qu'enceinte de vaporisation de cyanoacrylate portative.

On a conclu que le Coverup était un outil utile pour protéger les pièces à conviction sur les lieux de crime, surtout dans des conditions humides ou lorsqu'il vente. On a constaté que le Coverup se fixait bien aux surfaces uniformes, où il servait de couvercle standard propre pour les petites zones d'intérêt ou les pièces à conviction de petite taille. Les utilisateurs ont trouvé que le Coverup était trop petit pour bien couvrir les preuves plus grosses, comme de nombreuses empreintes de chaussure et de pneu.

On a déterminé que le Coverup pouvait aussi servir d'enceinte de vaporisation de cyanoacrylate portative efficace. Dans le cas des petites surfaces sur des objets qui ne sont pas faciles à transporter jusqu'au laboratoire de l'Identité, on peut mettre du cyanoacrylate dans un Coverup, qu'on fixe sur la surface; on peut ensuite surveiller le développement à travers le plastique transparent.

# “Coverup” Protective Covers for Evidence

## **Introduction**

At present, first officers at the scene of a crime do not have a ready-made means of protecting evidence until forensic identification personnel arrive. This often results in the less-than-ideal situation of police officers searching for cardboard boxes or other empty containers to place over items or areas of interest. The “Coverup” is an eight-sided clear plastic cover, approximately 12 inches across and 4 inches high, to be used by the first officer on the scene to cover evidence such as blood, footprints, bullets, or fibres, in order to prevent destruction or contamination. It can be held in place by any of three methods: adhesive foam pads, nails placed through nail holes along the edge, or through the use of four jagged slots along the edge which can be used to catch on to vegetation, etc.

In order to test this material, several samples were provided by CPRC to three RCMP forensic identification sections (two out West and one in the East) and one municipal police force. The forensic identification specialists distributed the “Coverups” to general duties members for use at crime scenes to protect evidence while waiting for ident attendance at the scene. As well, as suggested by the manufacturer, “Coverups” were tested in a separate experiment for their ability to serve as cyanoacrylate (CA) fuming containers that could be used *in situ* at the crime scene.

## Materials and Methods

Several "Coverups" were purchased by the CPRC and distributed across the country to forensic identification sections. Identification specialists were instructed to provide these to general duties officers for use at crime scenes to protect evidence until ident personnel could attend the scene.

To test "Coverups" as small cyanoacrylate fuming containers, experiments were carried out using new half-litre paint cans. Sample fingerprints were placed on five different cans. Four of the cans were sealed under "Coverups" using duct tape, along with samples of CA and containers of water, and left for periods of time ranging from one to four hours. All four cans were treated with Adrox solution and observed under Luma-Lite illumination.

In a second experiment, one can was fumed for 40 minutes in a standard heat and humidity CA chamber in the laboratory, while a second was treated under a "Coverup" for two hours.

## Results

Through the course of the field testing, only a small number of "Coverups" were actually deployed in real crime scene situations. On the West Coast, they were found to be especially useful in wet, rainy, or windy conditions. Bloodstain and fingerprint evidence could be protected from the elements using the "Coverups". The adhesive strips stuck well to glass, asphalt, wood, and painted walls. On rough ground, the adhesive strips would be of limited use, but objects placed on top of the "Coverups" could be used to weigh them down and hold them in place.

Cyanoacrylate fuming produced good fingerprints on cans that had been left exposed to CA fumes for two to four hours. For the can left for only one hour, only a few areas of ridge detail developed, and the results fluoresced weakly after Ardrox treatment. Fingerprints on the other three cans fluoresced strongly. The untreated control can showed only smudges where fingerprints had been placed.

Results obtained with the laboratory fuming chamber and the "Coverup" were quite similar. Fingerprints were developed in both cases, and in both cases, the fluorescence after Ardrox treatment was strong.

## Discussion

The idea of having available a standard, clean cover for protecting evidence at a crime scene is a good one.

The present method of using any handy available container can result in the evidence being poorly protected or contaminated. The "Coverups" can be used to protect fingerprints, bloodstains, handguns, cartridge cases, footwear impressions, and other types of evidence small enough to be covered. In the field, the adhesive strips worked well to stick the covers to smooth surfaces like glass or painted walls, and they would work well in future on other smooth surfaces such as tile or linoleum. The nail holes and jagged slots were not used in any of the field trials.

One drawback might be the size of the "Coverups". While they will work well to protect small areas or small pieces of evidence, they are likely too small for many footwear impressions, and could only cover small portions of a tire track impression. Another complaint was that the adhesive may be too sticky. One identification specialist reported having great difficulty removing the "Coverup" from a window in order to examine the area being protected.

CA fuming of small areas at a crime scene, like a car door handle, have reportedly been carried out by placing CA in a small container, such as a styrofoam cup, and sealing it against the surface. In a similar manner, small areas can be fumed with CA using the "Coverup" as the fuming chamber. In the present experiment, water was placed in the container along with the CA sample, but this might not be possible at a crime scene, especially for a vertical surface. The "Coverup" could be used for a larger surface than a coffee cup, and it is possible to observe the fuming process through the clear plastic. A minimum time of two hours was required for fingerprints to develop sufficiently, and these compared favourably to fingerprints developed in the laboratory.

The present experiments were carried out indoors at room temperature, so development times might be longer at lower ambient temperatures. Use of the adhesive strips to hold the "Coverup" in place at the scene might result in damage to the surface being treated, especially in light of other complaints about the adhesive being extremely strong.

## **Conclusion**

"Coverup" evidence covers are a useful means of protecting evidence at a crime scene. They fasten well to smooth surfaces and provide a clean, standardized cover for small areas of interest or small pieces of evidence. The major drawback would be their size, but overall they are a marked improvement over present procedures.

"Coverups" can also be used as small CA fuming containers at the crime scene. For small areas on objects that cannot be easily transported to the ident section, CA can be placed in a "Coverup" that can be fastened to the surface, and development can be monitored through the clear plastic.

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