

# CALIFORNIA DEPARTMENT OF JUSTICE

**BUREAU OF FORENSIC SERVICES** 

# PHYSICAL EVIDENCE BULLETIN



## COLLECTION OF PAINT EVIDENCE

<u>INTRODUCTION</u> - Paint evidence is found in the majority of hit-and-run cases, and it may provide a link between a victim and the responsible vehicle. Paint evidence may also be present in various other types of crimes, including burglary and homicide cases.

# A. HIT-AND-RUN CASES

- 1. Paint transferred to the clothing of pedestrian victims is usually present in microscopic quantities. Dry the garment completely if damp, but DO NOT HANDLE EXCESSIVELY. Then carefully wrap each item separately by rolling in paper or place each garment in a separate paper bag for delivery to the laboratory.
- 2. Many modern vehicles have more than one color and the paint transferred may only represent the color of the particular area on the vehicle that made contact with the victim.
- 3. It is sometimes possible to obtain the make, model and year of a vehicle from a paint transfer. This is particularly possible when Original Equipment Manufacturer (OEM) paint, representing several layers, has been left at the scene. In addition, broken lenses or other vehicular parts that are present are useful in make/ model searches and they should always be submitted to the laboratory along with any paint evidence. A copy of the officer's report should also be submitted to the laboratory, as it may contain information pertinent to the search.
- 4. In some cases it has been possible to physically match paint chips, broken lenses and other vehicular body parts found at accident scenes with the suspect's vehicle. Therefore, care should be taken to protect these items from breakage when they are collected.
- 5. Photograph all areas showing fresh damage on all involved vehicles, and collect exemplar paint samples from these areas. It is very important to collect samples from all of the damaged areas since paint of different type or composition may be found in different locations on the same vehicle, even though the topcoat color is the same. If the paint can be flaked off by bending the metal slightly, remove it in this manner. If not, cut the paint off using a clean knife blade, or razor blade. Make certain that samples of all layers down to the metal are collected. Carefully wipe the blade of any knife or tool employed before collecting each sample to prevent cross contamination. Place each sample collected from different areas in separate containers. These exemplar samples should represent an area of at least ¼" x ¼" to provide sufficient material for laboratory examination.
- 6. Cross transfers of paint commonly occur in hit-and-run cases involving two or more vehicles. If loose paint chips are located, collect and store them in appropriate containers as discussed in Section C of this document. If the transfers are smeared on the surface, flake off chips or cut paint from the vehicle and

include the transferred paint as well as the top layer of paint originally on the car. Keep all transfers recovered from different areas in separate containers.

7. When cross transfers occur, always collect known, uncontaminated samples from areas immediately adjacent to each collected transfer. This is of great importance since such specimens permit the laboratory to distinguish between the transferred paint and the paint originally present on the vehicle.

## B. BURGLARY CASES

- 1. Tools used to gain entry into buildings or safes often contain traces of paint as well as other substances such as plaster, safe insulation, wood, etc. Care must be taken that this type of trace evidence is not lost. If such transfers are present, wrap the end of the tool containing the material in a paper bag and seal with tape to prevent loss. **Do not attempt to fit the tool into marks or impressions found**. If this is done, transfers of paint or other material might occur and any material later found will not be significant as evidence.
- 2. Collect specimens of paint near all areas with which the tool may have had contact at the crime scene. These samples should include all layers present.
- 3. The tool itself may be painted and traces of this paint could be left at the crime scene, either on the toolmark or on the ground below the damaged area. Careful search should be made of each tool mark for any such evidence, and if present, the paint should be documented and collected. (See PEB No. 27 for the handling of tool mark evidence).

## C. RECOVERY AND PRESERVATION OF PAINT SPECIMENS

- 1. Keep all samples collected in separate containers.
- 2. If the sample is very small or difficult to remove and the complete exhibit itself can be submitted to the laboratory, then collect the entire object. This is the best procedure, as it will allow all of the paint to be examined, while minimizing the loss of such evidence.
- 3. Always chip, cut or otherwise remove samples of all layers of paint, if the entire object containing the paint cannot be submitted to the laboratory. <u>Avoid collecting samples by scraping.</u>
- 4. Glass vials, and metal or cardboard pillboxes should be used to store collected paint samples since they can protect paint chips from breakage and damage. If cardboard pillboxes are used, be sure to seal the box to prevent the leakage of small paint samples. Plastic containers should be avoided due to static electricity, which makes removal of small chips very difficult. If glass vials or cardboard pillboxes are unavailable, then small paint chips can be collected into paper bindles, and the bindles placed in envelopes. Care should be taken so as to prevent loss, contamination and damage to such samples when using paper bindles and envelopes for collection and storage.
- 5. A very useful method for securing paint from vehicles, walls and similar locations is to place a short strip of plastic tape on one side of the open end of a small envelope (but make sure paint doesn't leak out corners). The tape and envelope are then attached to the object containing the specimen. By holding the envelope open with one hand, paint can be chipped loose and into the envelope with a

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- clean blade. Once the sample is in the envelope the tape can be removed, the open end of the envelope folded several times, and then this folded area sealed with tape. Such a container may then be easily marked for identification.
- 6. Collecting paint chips using tape lifts should be used only as a last resort because the adhesive from the tape could potentially compromise the laboratory analysis of the paint evidence. If tape lifts are collected, frosted scotch tape (such as "Magic Tape") should be used since it tends to be less sticky than clear tapes. Do not use fingerprint tape when collecting tape lifts, or any other tape that has a very sticky adhesive.
- 7. Markings placed on labels, envelopes or other containers should include the collector's name, date and time of collection, as well as the specific source of the sample and location from which the sample was collected (for example: R/F fender 1970 Ford, blue in color, license #ABC 123). The Vehicle Identification Number (VIN) should also be included as this can be used to verify the make, model, year and color of the vehicle.

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