



Manufacturer's Information

Test No. 10-545: Paint Analysis

Each sample pack consisted of three items of layered paint and primer: one known sample (Item 1) and two questioned paint chips (Items 2 and 3) were cut from painted drywall substrate. Items 2 and 3 were prepared with the same primer and topcoat. Item 1 was prepared with a different primer and the same topcoat that was used for Items 2 and 3. Examiners were instructed to examine the questioned paint chips and determine if either could have originated from the known recovered paint.

SAMPLE PREPARATION-

The drywall substrate was wiped down to remove dust before painting. For the following preparations, each coat was allowed to dry overnight before applying the next coat. The painted drywall substrates were then stored at room temperature in a controlled humidity environment for several days. The known paint sample was packaged into a glassine envelope and pre-labeled coin envelope. Each of the questioned paint chips were packaged into separate glassine envelopes and pre-labeled coin envelopes after removal from the drywall substrate.

ITEM 1 (KNOWN): Item 1 was prepared by applying two coats of primer (Zinsser BIN® Shellac-Base Interior and Spot Exterior, White Tintable) to a drywall substrate. Then two layers of top coat (Glidden® Semi-Gloss Interior Paint, Natural Linen™ (40YY 60/103)) were applied. From the painted drywall, paint samples were scored and chiseled out using a utility knife and packaged as described above.

ITEMS 2 and 3 (ELIMINATION): Items 2 and 3 were prepared by applying two coats of primer (Kilz® Latex Interior/Exterior Water-base primer-sealer-stain blocker, White) to a drywall substrate. Then two layers of topcoat (Glidden® Semi-Gloss Interior Paint, Natural Linen™ (40YY 60/103)) were applied. Several paint chips were scored and chiseled out using a utility knife. Items 2 and 3 were taken in close spatial proximity to one another, within three inches, and were kept together as a batch and packaged as described above.

SAMPLE PACK ASSEMBLY: For each sample pack, an Item 2 and an Item 3 from the same batch along with an Item 1 were placed into a pre-labeled sample pack envelope and sealed with invisible tape. This process was repeated until all of the sample pack envelopes were prepared. Once verification was completed, the sample pack envelopes were sealed with evidence tape and initialed with "CTS".

VERIFICATION-

The expected elimination results were confirmed by predistribution laboratories, who used the following combined list of techniques: Microscopic Examinations, FTIR, and SEM/EDX.