

Endorsement appraisal for: Herman's Simply Clean - Collectors Silver Polish.

Introduction: The above-named product is a white paste whose constituent make up is a base of calcium carbonate and then other ingredients being proprietary. As a result, a more extensive period of testing was undertaken in order to establish not just short term and immediate results, but the longer-term results that manifest in the medium term after treatment on sterling silver. In order to test the product, tokens of sterling (0.975 assay) silver were used as test pieces for the analysis.

Testing observations

- 1. Loss of parent material: In order to test the product tokens of sterling (0.975 assay) silver were used as test pieces. The weights of the test tokens were taken prior to natural patination, and then subsequent to the patination. The test tokens were then treated as prescribed with the Silver Cleaner, and then weighed again. The loss of weight was so nominal as to be likely to have been caused by the cotton and cellulose that was used rather than the cleaner itself. In the testing process, both cotton and cellulose sponge were tested for the purposes of comparison, and neither provided a significantly preferable result when compared to each other.
- 2. <u>Alteration of surface texture:</u> The surfaces of the test tokens were polished to a high polish using bench polishing techniques such as those used by silversmiths worldwide. This resulted in striated texture that was only visible with the use of a 20x loupe, and this, in the reviewers' consideration, is a result that is consistent with a newly made piece, with a high polish finish. After treatment the like surfaces were compared and found not to have altered in any meaningful way at all. There was a difference in the striation, however, this was only visible with the aid of 50x magnification, and again considered to be a result of the method of cleaning rather than the Silver Cleaner used.
- 3. <u>Non-organic residue left after treatment:</u> The only residue picked up with the use of X-Ray fluoroscopy analysis was traces of calcium, presumed to be a result of the base of the material under analysis, and a nominal trace of silicon. However, these were found to be of no consequence in the cleaning and long-term results for the silver object.
- 4. **Organic residue left after treatment:** The use of Fourier Transform Infra-Red (FTIR) analysis revealed no relevant residue of any organic material on the surface of the test tokens. The reviewer would like to test with differing calibrations, however, the suspected result is that there would be no noticeable residue that would be of detriment to the domestic or historic object.

5. <u>Apparent parent material removal on carrier material:</u> Using a handheld XRF, the cotton material used as a carrier in the testing was tested to establish what silver or copper had been removed from the surface of the test tokens. The results conclusively showed that the most nominal amount of copper was removed however, even less silver was removed. In this respect it is apparent that no meaningful amount of material has been removed by testing. The only caveat to this is that with more pressure, it is entirely possible that more silver or copper may be removed. This however was not tested for.

Caveats

- 1. In practical terms, it is true to say that consumers both commercial and conservation based will try other forms of material carrier, however, it is safe to say that any detriment to the surface of the historic object would not be caused by the product under testing.
- 2. The product is utilised manually and therefore the amount of the product used, and the material carrier will vary as has been noted above. This is inevitable in the authour's opinion.
- 3. Longer-term manifestation of effects that might be attributable to the product have not been tested due to practical considerations, however, the authour has no reason to believe that any detrimental effect would manifest itself even in the longer term.
- 4. Calibrated XRF testing may prove both interesting scientifically and for the sake of endorsement in the longer term however this would not be considered a necessity by the authour.

<u>Summary</u>

Having fully tested the product **Herman's Simply Clean Collectors Silver Polish**, the authour has found it to be a product that he would fully endorse as a suitable polishing and cleaning product for both domestic use and use in conservation practice. The results are entirely satisfactory and result in a surface that can be deemed suitable for conservation purposes.

Declaration

All testing was completed by the authour who has no commercial or financial bias towards or to detract from the product. The authour has not been paid in any way, nor has any offer of payment been offered. All testing has been conducted at the authour's own expense.

All statements in the aforementioned assessment of the pro above named product are true to the best of the authour's knowledge

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