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**QUANTITATIVE ASSESSMENT OF ASBESTOS FIBERS IN WCD CLEANSING
CONDITIONERS**

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1. INTRODUCTION

Cardno ChemRisk was asked by WEN By Chaz Dean (“WCD”) to conduct a comprehensive risk and safety assessment of the cosmetic product commonly known as WEN[®] by Chaz Dean Cleansing Conditioner (the “WEN Products”), and, specifically, whether the product causes hair loss and/or any other adverse dermal event. This risk and safety assessment was triggered by complaints and allegations of hair loss by a small percentage of consumers who attributed their alleged hair loss to use of the WEN Products based on anecdotal evidence. As part of the evaluation, Cardno Chemrisk tested the WEN Products to determine the potential for the presence of asbestos fibers in the WEN Products. The reason this test is being performed as part of this evaluation is to eliminate the presence of asbestos as a potential cause of adverse dermal events given that the U.S. Food and Drug Administration has recently raised a concern about asbestos fibers being present in personal care and cosmetic products, particularly among products containing talcum powder.

2. METHODS

Two randomly selected lots were tested for each of the following varieties of the WEN Products: Sweet Almond Mint, Lavender, and Pomegranate. Each of the selected WEN Products were inverted for 2 weeks to allow any settled particulate to migrate to the bottle cap. Four to six gram subsamples of product were taken from the mouth of each bottle, which were then dried at 120°C for 5 days to remove the aqueous fraction. The products were then ashed at 460°C to remove the organic phase. The residues were acid washed to remove any acid soluble components. The final residues were suspended and sonicated in particle-free water, and then the aliquots were filtered and dried. Sections of these filters were collapsed, etched, carbon coated, and mounted on copper transmission electron microscopy (TEM) grids. Dual-mag analyses of each sample were performed on a Philips CM12 TEM at approximately 2650x and 19,500x magnification. Any detected asbestos structures were characterized by morphology and elemental composition.

3. RESULTS

No asbestos fibers were detected in any of the six analyzed samples. These samples included different lot numbers and bottle sizes. Analytical results are shown in Table 1.

Table 1. Analytical results

Lot Number	Product	Bottle Size	Lab Sample Number	Asbestos Weight Percent	Asbestos Type(s) Detected
06997-002	Sweet Almond Mint	16 oz	70000543	<0.005%	Not Detected
06997-003	Sweet Almond Mint	32 oz	70000544	<0.005%	Not Detected
936234	Lavender	16 oz	70000545	<0.005%	Not Detected
07435-002	Lavender	32 oz	70000546	<0.005%	Not Detected
96344	Pomegranate	16 oz	70000547	<0.005%	Not Detected
07278-004	Pomegranate	32 oz	70000548	<0.005%	Not Detected

4. CONCLUSIONS

Asbestos fibers were not detected in the WEN Products, therefore, no asbestos-related health effects are expected due to use of the WEN Products.