

Comparisons on The Effectiveness of Commercial Stain Removal Agents on Chiffon Fabric

Nur Farzanah Norarmi^a, Mohd Rozi Ahmad^{ab*}

Structured Abstract

Background: Stains are part of everyday life, and it is defined as unwanted substances in the wrong place. The fabrics are soiled by mechanical adhesion, electrostatic adhesion and redeposition of soil during washing. Commercial stain removal agents are subject to this problem by treating the different stains on the chiffon fabric.

Methods: In this study, five different stains were used, which are three water-based stains (coffee, food colouring, soy sauce), and two oil-based stains (foundation, and lip matte). The chiffon fabric's physical properties, including fibre identification, fabric thickness and weight, were determined. Three commercial stain removal agents were used in this study, Vanish Pre-Wash Spray, Oxiclean Laundry Stain Remover Spray and Amway Prewash Spray Soil and Stain Remover. The commercial stain removal agents' effectiveness was evaluated for colour intensity using a spectrophotometer and stain visibility under D65 of the lighting cabinet. The standard AATCC Test Method-130 for stain replicas was used to rate the stain visibility.

Results: The result showed that Vanish is the most affordable option, with the highest value of lightness and rating of stain release, providing the best cleaning performance on chiffon fabric. Otherwise, OxiClean and Amway are not good options for removing oil stains from chiffon fabric since they act poorly in removing stains. Therefore, Vanish is the most effective compared to Amway and OxiClean because it can remove all types of stains, both water-based and oil-based stains.

Conclusion: The study reviewed the effectiveness of commercial stain removers on chiffon fabric, revealing that their performance effectively alters water-based and oil-based stains. Commercial stain removers, along with detergent and softener, are crucial for maintaining healthy lifestyles and maintaining a clean environment in home laundering.

Keywords: Commercial stain remover, Chiffon fabric, Oil-based stain, Water-based stain

*Correspondence: rozitex@uitm.edu.my

^aSchool of Industrial Technology, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia

^bTextile Research Group, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia