

## Improving Functional Performance of Kitchens Towels by using Modal fibers

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### ABSTRACT

Towel fabrics are more common in household use, and are used in other places such as hotels, swimming pools and Ihram clothes. Their production is considered one of the most important economic development, and it is divided into groups according to the uses such as bath towels, hand towels, face towels, sea towels, kitchen towels, Dish Towels and Glass Cloth.

One of the basic requirements that must be characterized by the towels are absorption, softness of clothing , friction , withstand the stresses of the laundry , stability of color , speed of drought , light weight and the problems used are (overweight after absorption of water and need a long time to dry).

Modal fiber is very suitable for water absorption and dehydration quickly to be comfortable in use, and is characterized as soft , comfortable, very strong when it is wet or dry , light weight , retain the soft touch after repeated washing , luster, has high permeability to the air ,and when compared to cotton growth rate of bacteria Less .

Increasing interest in the use of the latter, And improve the efficiency of the performance of these fabrics in use of the most blended ratios, textile structures, in order to reach them to the highest levels of quality that achieve their effectiveness.

The aim of the Study is improving functional performance of kitchens towels by using modal fibers by reaching the best structure, the blended ratios of Modal. The production ten samples with two textile structures (Honeycomb and Mock Leon woven), and five blended ratios (All weft cotton , 3 weft cotton :1 weft Modal, 1 weft cotton :1 weft Modal , 1 weft cotton :3 weft Modal , All weft Modal ), and used Modal count 30/1 , The different tests were carried out on the fabrics producing air permeability , thickness test, weight , tensile strength, elongation and Stiffness in both directions, shrinkage in the width of the woven and Moisture absorption, and most of the samples have achieved the required results.

**Keywords:** Modal - blended ratios - Honeycomb – Mock Leon woven - kitchen towels