ABSTRACT

This thesis presents a broad study of the preferences of fabrics intended for use as uniforms. The two main aspects of the subject which are of particular practical interest have been thoroughly investigated. A survey was conducted to investigate in detail the different variables which affect the decision making process, purchasing pattern, post purchase satisfaction and mode of care of fabrics used for general purpose and uniforms.

Different types of uniform fabrics, varying significantly in fibre content, blend composition and fabric structure, were selected for the experimental work. They represent a fairly complete sampling of all commercial fabrics. An integrated study is presented by investigating the mechanical and related physical properties such as tensile strength, elongation and tear strength; aesthetic properties like drape coefficient, flexural rigidity, crease recovery, bending length, colour fastness and pilling; comfort properties comprising air permeability, wettability, thermal insulation characteristics, and thermal conductivity; bending and shear properties, on both the original and laundered states. A rapid method for determining blend composition from the moisture content of the fabrics has been described.
In addition to the above, wear index and economic index of the fabrics have been evaluated, both at the original level and after progressive levels of washing.

The consumer and market survey data reveal that, irrespective of their socio-economic status, consumers prefer blended and polyester fabrics for uniforms and for general use due to reasons like ease of care, good appearance and durability. In the absence of reliable information from labels and other sources, consumers consider price as the main criterion to judge the quality.

The results of the soil pick up and soil release properties indicate that polyester and polyester blended fabrics have a tendency to soil less and to release soil comparatively easier. On the basis of the results obtained from the serviceability assessment investigations, it has been found that the fabric consisting of $67\text{p}/33\text{c}$ and $80\text{p}/20\text{c}$ is suitable for use as uniform fabrics as far as the optimum performance is concerned.

In the light of the above findings, suitable recommendations and suggestions have been made.