

**NuDURA PRESS FINISH FOR VISCOSE RAYON
AND BLENDED POLYESTER/VISCOSE RAYON FABRICS**



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ABSTRACT

A New Durable Press Finish, termed as NuDURA PRESS, with its formulation and application method was established for light and medium weight cotton and blended polyester/cotton fabrics. This NuDURA PRESS Finish was then applied on to light and medium weight viscose rayon and blended polyester / viscose rayon fabrics. The treated fabrics were tested and analyzed for their handle properties, abrasion resistance, strength, flame resistance, water resistance, colourfastness, dimensional stability and formaldehyde content. Overall, it was found that the handle properties, tearing strength, flame resistance, water resistance and dimensional stability of fabrics have improved. The colourfastness was maintained while the formaldehyde content of fabrics was acceptable. This NuDURA PRESS thus becomes a new finish for viscose rayon and blended polyester/viscose rayon fabrics. It has also become the ONE formulation and application method of the new Durable Press Finish, NuDURA PRESS for common cellulosic and blended cellulosic fabrics.

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

Cellulosic based fabrics like cotton, viscose rayon and their blends with polyester require Durable Press Finish to improve the wrinkle and handle properties of fabrics. These properties include crease recovery angle, stiffness, drapability (drape coefficient) and appearance. Other properties normally being affected are abrasion resistance, strength, flame resistance, water resistance, colourfastness, dimensional stability and formaldehyde content. Viscose rayon and blended polyester/ viscose rayon fabrics have poor handle and other related properties as compared to those of cotton and blended polyester/cotton fabrics.

In the previous research of Mohd. Nor and Abu Bakar (2004), a new formulation and application method of Durable Press Finish, termed as NuDURA PRESS was established for light and medium weight cotton and blended polyester / cotton (65/35) fabrics . The NuDURA PRESS produced better handle properties of fabrics as compared to those of the present Durable Press finished fabrics.

The NuDURA PRESS Finish is now applied on to viscose rayon and blended polyester/viscose rayon fabrics, to study the effects on fabric properties and to establish the finish for those fabric.

1.2 PROBLEM STATEMENT

At present Durable Press Finish has been applied on cotton and blended polyester / cotton fabrics at the local textile mills. However, the properties of the treated fabrics were less satisfactory. Cotton and blended polyester / cotton have different formulation and application of Durable Press Finish. A ONE formulation and application method of a new Durable Press, termed as NuDURA Press has been establish for those fabrics. Viscose rayon and blended polyester/viscose rayon fabrics do not have any established formulation and application method of Durable Press Finish.