

Testing coated fabrics —

Part 20:Method 23: Method for determination of dimensional changes on mechanical relaxation at zero tension

IMPORTANT NOTE. It is recommended that this Part be read in conjunction with the information in Part 0 “Foreword and general introduction”

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Foreword

During the processing, production and subsequent batching and rolling operations carried out in the manufacture of a coated fabric, strains are introduced which are, at various times during the manufacturing process, alleviated, re-introduced, increased or maintained for varying periods of time. These strains are unlikely to be constant throughout the entire length of the roll. When, for example, the coated fabric is batched or re-wound after manufacture, the tension introduced into the coated fabric will tend to be greater when the roll is being wound at or near its maximum diameter than when it is at its minimum diameter. This difference in tension or strain may be even greater when the machinery being used is spindle driven, so that the surface speed of the roll being wound increases as its diameter increases. Even with surface driven rolls, i.e. when the surface speed of the roll being wound is constant, the tension introduced may vary depending upon the type of let-off motion employed on the feed supply.

In addition to these variables, as the coated fabric is exposed to elevated temperatures during its processing, the finished product normally contains less than its normal moisture content.

When, therefore, the coated fabric is unrolled and allowed to relax in a normal atmosphere under zero tension, the processing tensions or strains tend to decay and/or equalize and the coated fabric may absorb moisture. This decay of processing tensions and moisture uptake often result in dimensional changes occurring. It is these dimensional changes that this method of test seeks to measure.

This Part supersedes method 23 of BS 3424:1973.

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Summary of pages

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This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Amendments issued since publication

Amd. No.	Date of issue	Comments

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