

Testing coated fabrics

Part 2. Method 4. Pre-conditioning and conditioning of coated fabrics for testing purposes

The European Standard EN ISO 2231 : 1995 has the status of a
British Standard

National foreword

This Part of BS 3424 has been prepared under the direction of the Plastics and Rubber Standards Policy Committee. It is identical with ISO 2231 : 1989 'Rubber- or plastics-coated fabrics — Standard atmospheres for conditioning and testing', published by the International Organization for Standardization (ISO). This edition of BS 3424 : Part 2 supersedes the 1982 edition which is withdrawn.



In 1995 the European Committee for Standardization (CEN) accepted ISO 2231 : 1989 as European Standard EN ISO 2231 : 1995. As a consequence of implementing the European Standard this British Standard is renumbered as BS EN ISO 2231 : 1995 and any reference to BS 3424 : Part 2 : 1992 should be read as a reference to BS EN ISO 2231 : 1995.

Where the coated fabric is single face or double texture, the textile element of the coated fabric is likely, depending upon the type of textile involved, to contain moisture which has been absorbed from the air. The actual amount of moisture absorbed depends upon the type of cloth construction, the molecular make-up of the textile, the temperature and relative humidity of the surrounding atmosphere and the size and shape of the test piece or sample. Certain properties of the coated fabric, particularly its mass and those concerned with the breaking or stretching of threads, are affected by changes in the moisture content of the cloth.

In order to standardize methods of test, it is therefore important to control the moisture content of the coated fabric under test where changes in properties of the textile due to differences in moisture content are likely to affect the results. This is done by conditioning and testing test specimens in a controlled atmosphere.

Cross-references

There is no British Standard corresponding to ISO 554 : 1976, which was prepared by ISO/TC 125 'Test conditions', but the ISO standard is referred to for information only.

Additional information

For the conditioning and testing of uncoated textiles, attention is drawn to BS 1051 : 1981 and the fact that in that British Standard the tolerance on the relative humidity control is $\pm 2\%$ as opposed to $\pm 5\%$ due to the generally higher moisture imbibition of uncoated textiles and the consequential wider moisture hysteresis.

In the UK only atmospheres A and B, and where relevant atmospheres D of ISO 2231 are used, as these are the atmospheres most generally applicable to the conditioning and testing of polymer coated textiles in temperate climates. In addition, atmospheres B and D are the recognized standard atmospheres for the conditioning and testing of plastics and rubber in temperate climates (see BS 2782 Methods of testing plastics : Part 0 : 1982 Introduction and BS 903 Physical testing of rubber : Part A 35 : 1985 Temperatures, humidities and times for conditioning and testing of test pieces).

However for contractual or trade purposes, the tropical atmospheres specified in C and E may be relevant. In any event it is recommended that the standard atmosphere selected for conditioning and testing should be reported in the test report(s) of the relevant method(s) of test.

It is recommended that pre-conditioning, referred to in clause 4 should, when applicable, be conducted for a minimum period of 1 h.

Compliance with a British Standard does not of itself confer immunity from legal obligations.