International Standard

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Rubber- or plastics-coated fabrics — Determination of water absorption resistance

Supports textiles revêtus de caoutchouc ou de plastique — Détermination de la résistance à l'absorption d'eau

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Foreword

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This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (other than hoses)*.

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Introduction

Water absorption resistance is one of the important properties in rubber or plastics-coated fabrics used in the construction of, for example, tents, temporary shelters or domes, as well as roofing materials. Once the coated fabrics absorbs water, the water can be retained for a long period of time to cause stains which can develop moulds or, occasionally, deterioration of the substrate. The absorption mainly occurs at the edge of the fabrics exposed to water by capillary phenomenon, therefore the coated fabrics used for such products are usually processed with antiwater absorption treatments. The test methods in this document are useful to evaluate the water absorption resistance in quality of the coated fabrics.

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Rubber- or plastics-coated fabrics — Determination of water absorption resistance

WARNING — Persons using this document should be familiar with normal laboratory practice. This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

This document specifies two test methods for the determination of water absorption resistance of rubber– or plastics-coated fabrics:

— Method A: Using red ink, which is applied to coated fabric where water absorption phenomenon can be visually observed;

— Method B: Using a water detection test paper.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2231, *Rubber- or plastics-coated fabrics — Standard atmospheres for conditioning and testing*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 105-F02, *Textiles — Tests for colour fastness — Part F02: Specification for cotton and viscose adjacent fabrics*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Principle

The lower end of a test piece is immersed into water at the controlled temperature and humidity to evaluate the height to which water has risen, mainly due to capillary phenomenon.

5 Sampling

The sample shall be taken from the part of the roll excluding at least 1/10 of the total width from the selvedge and 100 cm away from the terminal in the longitudinal direction of the roll. However, when it cannot be taken in this way, it may be taken from the part of the roll that is composed of the coated fabrics.

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