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ISO 16532-3

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Paper and board — Determination of grease resistance —

Part 3: Turpentine test for voids in glassine and greaseproof papers

Papier et carton — Détermination de l'imperméabilité aux graisses —

Partie 3: Essai à la térébenthine pour papiers glassine et papiers ingraissables

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Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 16532-3 was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*, Subcommittee SC 2, *Test methods and quality specifications for paper and board*.

ISO 16532 consists of the following parts, under the general title *Paper and board — Determination of grease resistance*:

— *Part 1: Permeability test*

— *Part 2: Surface repellency test*

— *Part 3: Turpentine test for voids in glassine and greaseproof papers*

Introduction

The resistance of paper and board to penetration by fats, greases and oils in paper and board is of particular importance for certain purposes, for example the packaging of food. The packaging should not only provide an effective grease barrier, but should also prevent the formation of aesthetically unacceptable grease spots on the packaging surfaces.

Paper and board — Determination of grease resistance —

Part 3:
Turpentine test for voids in glassine and greaseproof papers

1 Scope

This part of ISO 16532 specifies a method for the determination of the grease resistance of paper and board. It provides an accelerated comparison of the relative rates at which oils or greases, such as those commonly found in foodstuffs, can be expected to penetrate voids in papers such as greaseproof or glassine, where the grease or oil resistance is provided by mechanical means only. It is not applicable to grades of paper or board that are given grease or oil resistance by means of a coating or internal treatment for which ISO 16532-1 or ISO 16532-2 apply.

2 Normative references

The following referenced documents are indispensable for the application 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 186*, Paper and board — Sampling to determine average quality*

ISO 187, *Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning the samples*

ISO 536, *Paper and board — Determination of grammage*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
grease resistance
ability of the paper or board to resist the formation of surface spots or stains, or the permeation of grease through the sheet

3.2
voids
places in the paper where the arrangement of the fibres is such that oil or grease can penetrate the sheet

4 Principle

The test piece is placed on a sheet of coated paper on a flat surface and a small mound of sand is placed on the test piece. The sand is then saturated with coloured turpentine. The time taken for a stain to appear on the coated paper beneath the sand is noted.