

---

---

**Paper and board — Determination  
of grease resistance —**

**Part 2:  
Surface repellency test**

*Papier et carton — Détermination de l'imperméabilité aux graisses —  
Partie 2: Essai de résistance au mouillage de surface*



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

Page

Foreword.....	iv
Introduction .....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions.....	1
4 Principle.....	2
5 Reagents .....	2
6 Apparatus .....	2
7 Sampling.....	3
8 Conditioning of samples.....	3
9 Preparation of test pieces.....	3
10 Procedure .....	3
11 Expression of results .....	4
12 Precision.....	4
13 Test report .....	4
Annex A (normative) Mixtures of reagents for preparing Kit test solutions.....	5
Bibliography .....	6

## 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 16532-2 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: Grease permeability method*
- *Part 2: Surface repellency test*
- *Part 3: Turpentine test for voids in glassine and greaseproof papers*

## Introduction

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

This document is a preview generated by EVS

# Paper and board — Determination of grease resistance —

## Part 2: Surface repellency test

**WARNING** — The method specified in this part of ISO 16532 involves the use of some hazardous chemicals, which are highly inflammable and are reported to be health hazards. Care shall be taken to ensure that the relevant safety precautions are observed.

### 1 Scope

This part of ISO 16532 specifies a method for the determination of the grease resistance of paper and board. Primarily, it is intended to establish an approximate level of grease resistance, by testing the degree of surface repellency and/or antiwicking characteristics of paper and board, internally or surface sized with organophobic materials such as fluorocarbons. Some packaging paper and board products, designed for containing pet foods, food for human consumption and other materials, are produced in this way, and any surface stains, due to grease wetting or penetrating the paper or board surface, are aesthetically unacceptable.

This test is not intended to determine the permeability of grease through the paper or board, for which ISO 16532-1 applies.

### 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 of samples*

### 3 Terms and definitions

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

#### 3.1

##### **grease resistance**

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

#### 3.2

##### **surface repellency**

ability of the surface of the paper or board to resist any wetting reaction to applied grease materials