
**Materials used as cigarette papers,
filter plug wrap and filter joining
paper, including materials having a
discrete or oriented permeable zone
and materials with bands of differing
permeability — Determination of air
permeability**

*Matériaux utilisés comme papier à cigarettes, pour le gainage des
filtres et comme papier manchette, y compris les matériaux possédant
une zone perméable discrète ou orientée et les matériaux à bandes de
perméabilité diverses — Détermination de la perméabilité à l'air*





COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: 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 Apparatus	4
6 Sampling	5
7 Procedure	5
7.1 General.....	5
7.2 Leak check of the test piece holder.....	5
7.3 Preparation of test pieces.....	5
7.4 Calibration.....	6
7.5 Insertion of a test piece.....	6
7.5.1 General.....	6
7.5.2 Materials with uniformly distributed permeability.....	6
7.5.3 Materials with a narrow and oriented permeable zone.....	6
7.5.4 Materials with an extended and oriented permeable zone.....	6
7.5.5 Materials with discrete permeable zones.....	6
7.5.6 Materials with bands of different air permeability.....	6
7.6 Measurement.....	7
7.6.1 General.....	7
7.6.2 Measurement of strips.....	8
7.6.3 Measurement of spills (papers recovered from manufactured products).....	8
8 Expression of results	8
9 Precision	9
9.1 Repeatability.....	9
9.2 Reproducibility.....	9
9.3 Results of an interlaboratory study (Study 1).....	9
9.4 Statistical discussion of <i>r</i> and <i>R</i> results for Study 1.....	11
9.5 Results of an interlaboratory study (Study 2).....	11
9.6 Statistical discussion of <i>r</i> and <i>R</i> results for Study 2.....	12
10 Test report	13
Annex A (normative) Leak testing of test piece holder	14
Annex B (normative) Calibration of air permeability standards and air permeability measuring instruments	16
Annex C (informative) Determination of relevant surface leakage of test piece in the test piece holder	20
Annex D (informative) Flow of air through porous materials	22
Annex E (informative) Compensation of calibration standards	24
Bibliography	27